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**FACTORS THAT AFFECTING THE CUSTOMER
SATISFACTION TOWARD MOBILE NETWORK SERVICE
PROVIDER**

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MASTER OF SCIENCE (MANAGEMENT)

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**FACTORS THAT AFFECTING THE CUSTOMER SATISFACTION TOWARD
MOBILE NETWORK SERVICE PROVIDER**

By

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ABSTRACT

Telecommunication Industry in Malaysia has been developed and growing fast over the last few years. The development make the competition among the providers becomes more intense as the demand of the customer also increase. To fulfil the demand, the providers are increasingly focusing on how to satisfy the customer and retain them. Customer satisfaction is established when the network provider fulfils the needs and desires of the customers. Therefore, this study was conducted to identify the factors that affecting the customer satisfaction toward mobile network provider. Service quality, network connectivity, billing and price and promotional activity chosen as the factors in this study. Total 360 of mobile network users or subscribers were participated in this study. Data collected via self-administered questionnaires and SPSS was used to analyse the data and test hypothesis. Result show that service quality, network connectivity, billing and price and promotional activity are significantly related to customer satisfaction. Moreover, service quality also showed as the main factor that affecting the customer satisfaction. Finally, the implications, limitation of the study and some recommendation for future research are discussed.

Keywords: Customer Satisfaction, Service Quality, Network Connectivity, Billing & Price, Promotional Activity, Mobile Network Service Provider



ABSTRAK

Industri Telekomunikasi di Malaysia telah berkembang pesat dan membangun sejak beberapa tahun kebelakangan ini. Pembangunan tersebut menjadikan persaingan antara pembekal menjadi lebih sengit memandangkan permintaan pelanggan juga meningkat. Untuk memenuhi permintaan, para pembekal semakin menumpukan perhatian kepada cara untuk memuaskan pelanggan dan mengekalkan mereka. Kepuasan pelanggan wujud apabila rangkaian mudah alih tersebut memenuhi keperluan dan keinginan pelanggan. Oleh itu, kajian ini dijalankan untuk mengenal pasti faktor-faktor yang mempengaruhi kepuasan pelanggan terhadap pembekal rangkaian mudah alih. Kualiti perkhidmatan, sambungan rangkaian, bil dan harga dan aktiviti promosi dipilih sebagai faktor dalam kajian ini. Sebanyak 360 orang pengguna atau pelanggan rangkaian mudah alih telah mengambil bahagian dalam kajian ini. Data yang dikumpul melalui soal selidik dan SPSS digunakan untuk menganalisis data dan hipotesis di uji. Keputusan menunjukkan bahawa kualiti perkhidmatan, sambungan rangkaian, bil dan harga dan aktiviti promosi sangat berkaitan dengan kepuasan pelanggan. Selain itu, kualiti perkhidmatan juga ditunjukkan sebagai faktor utama yang mempengaruhi kepuasan pelanggan. Akhirnya, implikasi, batasan kajian dan beberapa cadangan untuk penyelidikan masa depan juga dibincangkan.

Kata kunci: Kepuasan Pelanggan, Kualiti Perkhidmatan, Sambungan Rangkaian, Pengebilan & Harga, Aktiviti Promosi, Pembekal Perkhidmatan Rangkaian Alih



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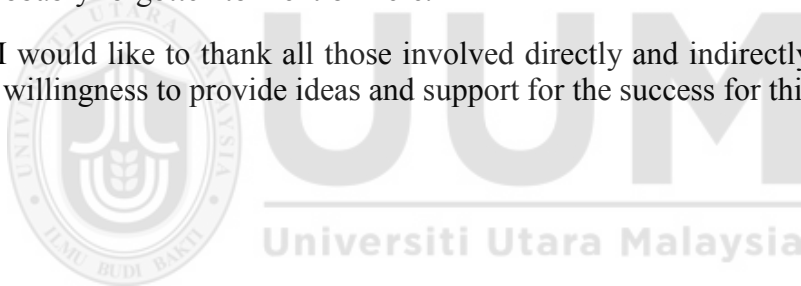


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LIST OF ABBREVIATION

MCMC	Malaysia Communication and Multimedia Commission
HUSP	Hand Phone User Survey
CS	Customer Service
BP	Billing & Price
NC	Network Connectivity
PA	Promotional Activity
SMS	Short Message Service
SERVQUAL	Service Quality
SPSS	Statistical Package for the Social Sciences
ANOVA	Analysis OF Variance

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Telecom services have been acknowledge as a significant instrument for a nation's socio-economic and political growth, and thus telecom infrastructure is treated as a key factor in achieving the country's socio-economic goals. To achieve these goals, the service offered should meet customers ' needs and requirements.

Customer satisfaction linked to the services offered to its customers and how the company can meets their expectations. It relies on the perceived results of a product in providing value relative to the expectations of a purchaser. If the output of the products falls short of the expectation of the customer, they of course will be unhappy and dissatisfy. If the output of the goods surpass the customer's expectation, the buyer would be happy and satisfy. In order to maintain their customer satisfied, outstanding marketing businesses go out of their manner. Satisfied customers create repeated purchases and inform others about their excellent product experience. The key is to match the expectations of the client with the results of the business. Smart businesses strive to charm clients by promising on what they can exactly delivered, and then providing more than what they do promise, that strongly related to quality.

This study therefore addresses the primary factors of customer dissatisfying on mobile service through various research methods and suggests the possible alternatives. Overall, this study includes the thorough analysis of customer satisfaction toward mobile service provider network and its interpretation, the literature review on customer satisfaction, and recommendation and conclusion that could form the foundation for company strategy and

strategic plan formulation on variables affecting the customer satisfaction toward mobile service provider network.

1.1 Background of Study

Customer satisfaction is essential to the customer-centric paradigm shift and has attracted a great deal of attention from academics and professionals as it has become one of the cardinal means of attaining quality enhancement programs and become one of the key drivers of the strategic marketing leadership for the company organizations with long-term achievement prospects (Owiye, 2012).

Mobile telecommunications sector has been characterize by elevated technological rivalry in the latest economic environment, which has become the highly important to any business successful that made when the players pay attention to customer satisfaction (Oliver, 2007). Over the last few years, the mobile communications has become the primary and be in a very important manner in people's daily life. According to Bahia and Suardi (2019), in year 2018, almost 300 million people connected to mobile phone, bringing the total connected population to more than 3.5 billion people globally, and the number increase continuously every day.

In addition, Mobile phone also one the easiest way of accessing the internet and resulting growth in mobile internet adoption also drives digital inclusion especially in low and middle-income countries (Bahia and Suardi, 2019). Thus, nowadays, mobile phone as well as smartphone are more to multimedia, capable of making and receiving calls, taking pictures, playing music, etc. the mobile technologies concentrated not only on features, but also on hand phone design and aesthetics. Which lead to more pressure in term of competitiveness among the Mobile Service Provider Network companies. It drives the companies to take note all the

crucial matter in order to gain customers attention and specially concerned about their satisfaction.

Moreover, in Southeast Asia, mobile internet also has unprecedented growth. A total 90% of the region's Internet access is via smartphone, and the average user spends 3.6 hours each day on mobile devices accessing the internet (Tutela, 2019). Most of the countries in Asia already adopted in using mobile phone as their daily item to communicate and for other purposes. Tutela (2019) also shared that, in 2018, Malaysia has the highest continuous performance in term of the consistent quality of any nation in Southeast Asia. Among the many companies' service providers in Malaysia such Celcom, Maxis, Digi, Tune Talk and U-mobile, Maxis showed the highest percent (96%) as the best provider in the region.

Malaysian telecommunications industry that involves in both mobile and fixed service suppliers also has undergone very fast development, especially over the past decade. The sector, chosen as a strategic platform for transforming Malaysia into a developed country since the early 1990s and until now it becomes one of the country's key structures (Ahsanul et al., 2007). As one of the many services in the industrial field, Telecommunication Industry in Malaysia are characterized by high customer contact together with individually customized service solutions in, which make the customer satisfaction increasing focus in term of researched arousal (Wen and Hilmi, 2011; Munyanti and Masrom, 2018).

The competitors quickly match with any new offerings from the result of customers that are typically perceive very little difference in the services offered by retail providers (Coskun and Frohlich, 1992; Devlin et al., 1995). Besides, the past study by Levesque and McDougall (1996) also point out that the main determinants of customer satisfaction in the retail sector are the service quality, features, customer service, complaint handling and situational factors and the future intentions.

1.2 Problem Statement

Mobile services segment mainly drives the growth rate and increasing the number continuously over the year (MCMC, 2010). The importance of mobile phone was not merely as a tool for communications only but as the technology evolved along the time passes, the device become more integral to people's life as it supports more service such as computing access to internet and video streaming. Accordingly, the data collection and the trends data may be vary over the time, as the customer commonly shift their focus and demand. Mobile phone also has rapidly become the preference for the most Malaysian to remain connected. The percentage of smartphone users has continue to rise from 68.7% in 2016 to 75.9% in 2017 based on result from Hand Phone User Survey (MCMC, 2017).

Malaysian service providers reaped the benefits of widespread the coverage of mobile throughout the nationwide. Malaysia Communication and Multimedia Commission (MCMC) and service providers worked hand-in-hand together and propelling the new services as mobile phone adoption started to increase in order to meet the pent-up demand and catch up the customer satisfaction (MCMC, 2018). However, the increasing the demand, the level of the customer satisfaction also higher and same goes to the customer complaint.

According to Yeoh (2019), the Communication and Multimedia Consumer Forum of Malaysia (CFM) stated that, the Malaysian consumers had the most complaints in the network and billing & charging categories the whole year in 2018. Dealing with a network problem and inefficient provider can be frustrating as a customer. The forum that received a total 6,330 complaint last year and 33% increase rather than year 2017. Between the two issues, the highest complaints is about the network issues. Resulting in increasing 54% in year 2018 rather than in year 2017. Main problem that arise under this issue is about the high-speed broadband section, no coverage, service disruption and service downtime. Meanwhile, problem under the

billing and charging issue is about the billing disputes, unreasonable charges, rebates or refund problem, poor billing systems and roaming. The pricing also shows the significant increase in complaints rather than last year. Regarding the issues that arise, network connectivity and billing and charging as well as the pricing seems to be important thing that can affect the customer satisfaction toward the service network provider. Thus, the relationship will be studying in this dissertation paper.

This study aim to understand the behavior of customers of Malaysian mobile service providers along with the increasing amount of customer make fact with the reality that the satisfaction is a significant aspect for companies in this industry to considerate. This research is to determine whether there is relationship between the service quality, network connectivity, billing and price, promotional activity and the satisfaction of customers towards their service network provider.

1.3 Research Question

This study was guided by the following research question:

1. Does Service Quality has relationship with Customer Satisfaction?
2. Does Network Connectivity has relationship with Customer Satisfaction?
3. Does Billing and Price has relationship with Customer Satisfaction?
4. Does Promotional Activity has relationship with Customer Satisfaction?

1.4 Research Objective

The objectives of this research that need to be achieved:

1. To identify the relationship between Service Quality and Customer Satisfaction.
2. To examine the relationship between Network Connectivity and Customer Satisfaction.
3. To investigate the relationship between Billing and Price and Customer Satisfaction.
4. To determine the relationship between Promotional Activity and Customer Satisfaction.

1.5 Scope of Study

This study is aims to examine the factors (service quality, network connectivity, billing and price and promotional activity) and customer satisfaction toward mobile network service provider.

This study used the analysis unit consisting of male and female. The respondents of this study were mobile network subscribers or users around 15 to 40 years old. The researcher select Kubang Pasu District as the location to distribute the questionnaire. The total of this participation derived from the statistical data issued by Malaysia Communication and Multimedia Commission (MCMC). In addition, the selection of the range age around 15 to 40 years old based on the result from MCMC that the major users of mobile phone are from that range age group. Which considered as the most suitable respondent for this study.

Thus, the population selected based on the aim of the study in determining the factors that affecting the customer satisfaction toward mobile network service provider. Therefore, the researcher intends to analyze and study the relationship between customer satisfaction and service quality, network connectivity, billing and price and promotional activity and come out with the factors that affecting the most to the provision of mobile services.

1.6 Significant of Study

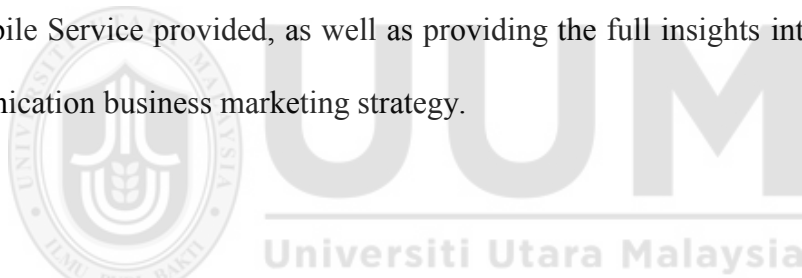
This study can provide valuable information to the two perspectives as follows:

i. Practical Perspective

The results of this research will provide professionals and marketers with helpful suggestions and will determine the factors that affecting the customer satisfaction especially in telecommunication industry. The objective is to provide an overview and in-depth forms of customer experience and satisfaction with the use of mobile phone services.

ii. Theoretical Perspective

By analyzing the customers in different backgrounds, this study can provide the marketers with a better knowledge and information of the customer requirements and will satisfy the Mobile Service provided, as well as providing the full insights into the growth of the telecommunication business marketing strategy.



1.7 Definition of Terms

This section will elaborate on few key terms which were used in this study with an explanation of the meaning for each term.

1.7.1 Mobile Network Service Provider

Refers to independent communication service providers that own the complete telecom infrastructure for managing mobile communications between the subscribed mobile users with users in the same, which in both external wireless and wired telecom networks.

1.7.2 Customer Satisfaction

In the mobile network context focuses on the achievement of customer's requirements in term of their needs and wants. As well as how the expectations of the customer are met (Kotler et al

2011). Customer satisfaction actually is something that difficult to be measured and only can be known after the product or services being use by the customer due to it was a personal feeling of either pleasure or disappointment resulting (Munyanti and Masrom, 2018).

1.7.3 Service Quality

In this study, service quality defined as the assessment of how well a delivered service conforms to the customer's expectations. Parasuraman (1988), define service quality as the degree and direction of discrepancy between the consumer's perceptions and expectations, or the extent to which a service meets or exceeds customer expectations.

1.7.4 Network Connectivity

Defined as the extensive process of connecting various parts of a network to one another such as the user. It also shows on how that process works. In this study, network connectivity quality is about the quality of mobile network in the area, and connectivity especially the numbers of error during downloading and uploading activity (Munyanti and Masrom, 2018).

1.7.5 Billing and Price

Billing defined as the written statement of money that customer owe for goods and services that their subscribed. While, price defined as the quantity or amount of payment given by the network provider in return for subscribed or buy the goods or services (Kim et al., 2004)

1.7.6 Promotional Activity

Defined as activities that service network provider do in aimed at achieving specific objectives such as increasing the profit and market share (Yang, 2009). Promotional activities also can determine the level of diffusion of a new product on the market (Delre, Jager, Bijmolt, and Janssen, 2007).

1.8 Organization of Dissertation

This dissertation consists of five (5) chapters that will be discussed in detail in the content of study. Chapter one has provided an overview of research background, problem statement, research question, research objectives, significance of the study and definition of key terms related to the topic.

Chapter two provides a review of previous literature conducted in the past that is related to Customer Satisfaction in Telecommunication Industry. In this chapter, the relationship between customer satisfaction and service quality, network connectivity, billing & price and promotional activity is discussed. In addition, the underpinning theory, theoretical framework and hypotheses of this study are also included.

Chapter three discusses the research design which includes the overall information from various aspects of research methodology. This chapter also consists of information regarding population and sampling, data collection and analytical method.

Chapter four explains the results of data analysis. It includes the demographic background of the respondents, reliability analysis, descriptive analysis, correlation analysis and multiple regression analysis.

Chapter five discusses the results, implication, limitations for this study and further recommendations and finally the conclusion to summarize the whole study.

1.9 Summary

This chapter discussed the background of study and the problem statement. The research questions and research objectives were outlined. The significance and the scope of this study are also highlighted. The following chapter focuses on the literature related to this study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Past study by Sekaran (2000), describes the literature review as a record of an extensive review of both published and unpublished work from the secondary data sources in an area of particular researcher interest. This section therefore reviews associated literature on the study issue as a basis for the development of a theoretical framework to be testify in this study. Four sections of this chapter structured: customer satisfaction, service quality, billing & price network connectivity and promotional activity.

2.1 Customer Satisfaction

2.1.1 Definition

“Customer satisfaction is defined as a customer’s overall evaluation of the performance of an offering till date” (Johnson and Fornell 1991). Perhaps due to its significance as a main component of business strategy and goal for all company operations, particularly in today's competitive market Customer satisfaction is a word that has earned a great deal of attention and interest from academics and professionals (Anderson et al, 1994). Customer satisfaction is actually a term for business and commerce industry to define a successful in fulfilling the customer’s expectation. It is a key performance indicator, which differentiates a company with their competitors in a competitive marketplace where business compete to attract customers (Munusamy, Chelliah and Hor, 2010)



Customer satisfaction is a parameter for measuring profitability of business; higher satisfaction leads to higher sales of merchandise and services generating higher revenues of the business. Through understanding the customer satisfaction can be consider as the fundamental principle of this research work. The definition of customer satisfaction given by Philip Kotler (Kotler et al 2013) says that predetermined is by how the expectations of the customer met. Thus, the customer satisfaction connected directly to customers' needs. The degree to which the needs are fulfilled determines the enjoyment in the case of disappointment from discrepancy (Hill et al. 2007; Guterman, 2015).

Compared to expectations, customer satisfaction can be regard as a psychological or self-rule summary description based on customer experiences. For instance, this idea has been defined in distinct respects as a "sensation in an extensive way, or attitude, an individual has about a product after it has been bought" (Solomon, 2004). It also described as the form of a short, emotional and variable reaction density that focuses on particular elements of the purchase or consumption that occurs at a precise moment when the object resides (Giese, 2000).

Salem Khbresh (2012) had mentioned in its study that satisfaction in the view of mobile phone is a self-expression of how the customer replies to the condition such as needs and desires. Satisfaction had be highlighted as the assessment of the mobile communication of the signal, and its content gives a level of comfort relating to this requirement, that includes the completion of the needs and desires to provide more than they expect. Satisfaction reflects an opinion and evaluation of post-consumption that contains elements of both cognitive and affective feeling. Satisfaction and relief based on the level of reinforcement and arousal (Oliver, 2007).

Besides, according to Berman and Evans (2010), also agree that the customer satisfaction occurs in the case of customer services in order to meet the expectation from customer. Furthermore, customer services such as payment facilities, after-sale services, home delivery, and high quality of product are needed to achieve customer satisfaction. Therefore, customer service is related with customer satisfaction, which is affected by expectation, experience, and evaluations.

2.1.2 Past Studies on Customer Satisfaction

Customer satisfaction can makes one telecommunications service provider have loyal customer. Previous study discovered that the brands could create lengthy and profitable customer relationships through the help of customer satisfaction (Eshghi, Haughton, and Topi, 2007). While generating satisfied and loyal clients is expensive, in the end this would prove lucrative for a firm (Anderson, Fornell and Mazvancheryl, 2004). A company should therefore focus on improving the quality of service and charging the suitable fair price to fulfill its clients, which would ultimately assist the company maintain its clients (Gustafsson, Johnson and Roos, 2005).

After that, the Satisfaction also is a “person’s feeling of pleasure or disappointment resulting from comparing a product’s performance (outcome) in relation to his or her expectation” (Kotler and Kevin 2006). Moreover, there are research on customer satisfaction that has evolved around two wide kinds of assessments: (1) transaction-specific satisfaction (2) cumulative satisfaction or an attitude-like general satisfaction idea (Johnson et al. 2001).

Traditionally, the satisfaction also considered transaction-specific, resulting from the judgment or affective reaction immediately after the purchase (Oliver 1993). The other research by De Ruyter et al. (1997) also used the transaction-specific concept and showed the result of perceived quality-satisfaction relationship. In the literature over the last decade or so, an

economic psychology-based approach to satisfaction been developed in, which is the concept of cumulative satisfaction. The other word, this concept can be defines the customer satisfaction as the overall experience for a customer to date with a product or service provider (Johnson et al.2001). Hence, the overall concept of customer satisfaction was used by Anderson and Fornell (1994); Fornell et al. (1996); Johnson et al. (2001), etc.

If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly satisfied and delighted. In case of mobile commerce, customer satisfaction is customer's post-purchase appraisal and emotional response or reaction to the overall product or service, familiarity in a mobile commerce environment (Lin and Wang, 2006).

Based on the existing customer satisfaction literature, we can conclude that the customer post-consumption assessment of the product and/or service used that contains cognitive, as well as affective elements is a customer satisfaction also. The amount of reinforcement and excitement based on satisfaction and relief (Oliver, 2007).

2.2 Service Quality

2.2.1 Definition

Bitner et al. (1994) define service quality as “the consumer’s overall impression of the relative inferiority/superiority of the organization and its services”. Other researchers view service quality as “a function of the differences between expectation and performance along the quality dimensions” (Parasuraman et al., 1991). The service quality has gain many attention from academics and professionals alike. Service Quality described as the general evaluation of a service in the services marketing literature.

Parasuraman et al. (1988) identified 10 detailed determinants of service quality through focus group studies: Tangibles, reliability, responsiveness, communication, access, competence, courtesy, credibility, security, and understanding/Knowledge of the customer. Later these ten dimensions were be further purified and developed five dimensions- tangibles, reliability, responsiveness, assurance and empathy to measure service quality, SERVQUAL (Parasuraman et al. 1988). The SERVQUAL instrument has been the predominant method used to measure consumers' perceptions of service quality. It has five generic dimensions or factors; **Tangibles** (Physical facilities, equipment and appearance of personnel), **Reliability** (Ability to perform the promised service dependably and accurately), **Responsiveness** (Willingness to help customers and provide prompt service), **Assurance**: (Including competence, courtesy, credibility and security) and **Empathy**: (Including access, communication, understanding the customer).

After that, McKenna (1991) also suggests that organizations to achieve satisfied customers should forget about market reviews, advertising, and promotions instead they should emphasize appropriate infrastructure in order to provide appropriate products and services to meet customer's needs. Therefore, in order to upgrade the perceived quality, regular assessment of customers' needs, desires, tastes, and interests recommended (Ranjbarian et al. 2012).

Ghylin et al. (2008) also mentioned that companies would be able to deliver services with a high quality and might leading to increase the customer satisfaction by defining the exact of quality of service. Thus, understanding the quality of service must include recognizing the features of service that are intangible, heterogeneous and inseparable (Parasuraman et al., 1985).

2.2.2 The relationship between Service Quality and Customer Satisfaction

Service quality is a crucial precedent for satisfying customers (Cronin and Taylor, 2002). On the other side, customer satisfaction believed to affect future purchasing and decision-making. In the initial 10 determinants of the service quality of the government service sector, Parasuraman et al. (1985) were recognized.

Besides that, service quality has been the subject of considerable interest by both practitioners and researchers in recent years (Henderson 2013). According to the satisfaction model, customer satisfaction influenced by service quality (Uddin and Akhter 2012). When customers get expected service quality, it leads to higher satisfaction (Hutchinson et al. 2009). Quality is a multi-dimensional phenomenon (Mosahab et al. 2010). Thus, reaching the service quality without distinguishing the important aspects of quality is impossible.

The main customer-focused business strategy is to assess and monitor customer satisfaction and quality service. Service quality is a critical element in the perception of customers as it is before customer satisfaction. This is because the evolving role of service in today's economy is the primary factor behind the emergence of high-quality service problems at the institutional and community level. Previous study also has shown that enhancing the quality of service client satisfaction related to repurchase plans, customer retention, market share and financial return linked to the quality of service mobile network provider customer satisfaction (Zajac et al, 2000; Soteriou and Chase, 2000).

The actual service customers expected (expected service) and services perceived (perceived service) can be considered as the two main aspects that describe and affect both service quality. According to Parasuraman, et al.(1985), through the comparison between service perceptions with service expectation, it can make the creation of customer satisfaction for a service be identified. Based on the perceptions of quality received, customers determine

the amount of satisfaction of any bought services. Customer satisfaction evaluation therefore captures the quality of service and in this study and the prior measurement used to evaluate the quality of service of mobile network provider that used to evaluate customer satisfaction.

In addition, Zeithaml and Bitner (1996) clarified that the quality of service to those with customer expectations is the excellence or superior service delivery method. There are two primary variables affecting service quality, which are service anticipated and service perceived. If the presented services is less than what are they expected, then the perceived service quality is bad. Therefore, if the service presented as what are they expected then the quality of the service is either good or satisfactory, but if the services presented is exceed the customer expectations, the perceived quality of the service is very good or ideal. Quality of service will rely on the capacity of the service provider and continuously satisfy the consumers ' requirements and wishes.

2.3 Network Connectivity

2.3.1 Definition

Connecting process been defined in different parts of a network. Connectivity quality in this research network is all about the quality of the area's mobile networking, and connectivity is about the number of errors during the download process and the upload operation. Network connectivity also relates to the network quality or the network signal strength and its quality (Wang, et.al, 2013).

According to Ojo, O. (2010), a business that can offer higher-quality services has a good opportunity of employing the customers who are prepared to return and pass on the

company's results, particularly on the quality of their network involving call quality, coverage and network.

An important aspect of the association between a business and its customer is the capacity to make quality phone calls, and it should reflect the company's quality attempts or in other word the network connectivity. The earliest form of wireless "personal communication" can be considered cellular radio.

Cell radio allows subscribers to location and obtain telephone calls wherever cellular coverage supplied over a wireline telephone network. Compared to prior mobile radio systems, the distinctive characteristic of cellular systems is the use of many base stations with comparatively tiny radio coverage or footprint coverage.

2.3.2 The relationship between Network Connectivity and Customer Relationship

Past study by Day, Hsueh, Liggett, and Ren (2001), concluded that there are top three reasons the consumers selected a current provider were: (1) the service coverage area; (2) the service plan cost; and (3) the number of minutes included in the service plan. After that, another factor that could be linked with satisfaction is the impact of regular vs. uncommon and unfamiliar use of a service.

After that, signal quality and network coverage have always been essential criteria for selecting mobile network service providers. During the previous years, where technology had not advanced so much in certain area, and make the company networks were limited only to certain locations (Rahman. H, 2014). Today the signal quality has been improved and the company networks have grown largely. Surveys of the past study have shown that both signal quality and network coverage affect positively consumer's satisfaction and the image of the company (Woo, Fock 1999).

Rahman. H (2014) study also reveals that, the operator's network/signal coverage, pricing, offering, fulfillment of customer demand, value added service, brand value and operators contribution to society have insignificant influence on customer satisfaction. Strong signal coverage is key determinants of customer satisfaction; mobile telecommunication build upon a network signal that convey voice call, voice SMS, internet service, information service etc. Network Providers should be concerned with establishing a strong network signal for promoting value added service has play an great impact on client satisfaction.

In addition, Chen, Lu, Gupta and Xiaolin (2014) conducted a survey on 783 mobile subscribers in China about the network connectivity issues. The results of the study showed that low quality network service creates more dissatisfaction among mobile phone subscribers and increase the tendency to switch to the other network operators. Similarly, both the network quality and fair pricing have significant influence to choose the mobile operators as service provider (Khan and Afsheen, 2012). Thus, low network quality increasens the more number of complaints, which undoubtedly lead to high customer dissatisfaction. In this regard, mobile operators must have to ensure strong network quality to satisfy their subscribers.

2.4 Billing and Price

2.4.1 Definition

According to Kotler and Armstrong (2010), for the benefit by customer of having or using the product or service, the price of the amount of money charged for a product or service or the sum of the values exchanged. While, in Stanton, Michael and Bruce (1994) past study, defined price as “the amount of money or goods needed to acquire a combination of other goods and services provided by the company”.

In the telecommunications industry, the price is not limited to the price of a SIM card, but also includes the recharge voucher, the services and also the telephone price in which involves the mobile service operator or provider in particular (Haque et al., 2007). It is not only for purchasing prices, but also involves the expenses of keeping the service provider relationship (Adebiyi et al., 2016).

Besides, according to Santouridis and Trivellas, (2010), the reasonable prices, a variety of price schemes, affordable call rates and degree of choice are the tool that greatly affects the customer's buying behavior. The telecommunications market, price tariff also plays a vital role, especially for mobile service providers. At the same time, it also affects the customer that first compares the price among the providers before choosing that the provider they want to subscribe. Thus, the level of pricing plan structure has great influence on customer satisfaction has been much less important for heavy users and makes users loyal.

2.4.2 The relationship between Billing & Price and Customer Satisfaction

Billing and prices is a very important issue leading to satisfaction. It helps to develop customer satisfaction and loyalty by charging the affordable and reasonable price. Research has shown that the decision of the customer has a direct impact on satisfaction level and loyalty and indirectly when to accept a particular price (Martin-Consuegra, Molina and Esteban, 2007). Rahman. H (2014) stated that, several factors that effect on customer satisfaction and price is one of them. Price used as an indicator of product quality, which results in better expectations from the product and determines higher satisfaction.

Meanwhile, according to Herrmann et al. (2007), that customer satisfaction is indirectly influence by price fairness perception while directly influenced by price perceptions. The satisfaction can be affected by the fairness of the price itself and the way it is fixed. Therefore, regarding to Lommeruda and Sørsgard (2003), the telecommunications services are like

undifferentiated products, customers are not always price-sensitive, and brand loyalty sometimes participates in brand preferences. Thus, the result is with old monopolists, some of the consumers retained. Moreover, the past literature investigated showed a substantial role of billing and price with the customer satisfaction, so this research also included the variable and assessed their impacts on customer satisfaction in Malaysian telecom industry.

Besides that, the billing and pricing that providers charge for rendering service perceive insignificant to customer satisfaction. Pricing should be consistent with the value that providers provide. Therefore, the network providers should have to have cared about pricing policy that reveals as a fair to the customer that they ready to pay. In Rahman. H (2014) study reveals that the service offers that operators provide have insignificant influence on valuing their service satisfaction. The providers should designed service offering consistent with the requirement of customer has a greater service value. The service is intended to provide to satisfy customer demand; however, the study reveals that customers have an insignificant perception towards fulfillment of demand that operators provide. Service that should be what customer demanded should be evaluate carefully in future.

If a brand is providing compatible price and increase in price are fair then customer takes it positively which create a sense of satisfaction among customers and vice versa. Hanif, et al. (2010) research study, has shown that most of the customers are influenced by the call charges and SMS packages and if they feel that price are fair and brand is providing worth giving packages, it would help in making customers more satisfied and even in long-term retention in future.

The impact of value on satisfaction has taken much less research attention than the roles of expectations and perceptions of performance (Monroe, 2003). The perceptions of post-purchase price have a substantial, beneficial impact on satisfaction (Voss, Parasuraman, and

Grewal 1998). Besides, the Zeithaml and Bitner (2000) study, argued that service cost could have a major impact on perceptions of quality, satisfaction, and the value. This is because services are intangible and often hard to judge before buy, price is often used as an alternative measure that will affect expectations and perceptions of quality.

2.5 Promotional Activity

2.5.1 Definition

Promotion is one element of the marketing mix known as the 4P's of Price, Product, Promotion and Place. Promotion define as communication tools that communicates the benefit of the products or services to potential and current customers. According to Dordevic and Cockalo (2010), promotion is consider as one of the main processes to communicate with the customers. The goal of promotion activity is mainly to increase the profits or the market share.

Hence, the promotion and promotional strategies have to follow according to the company's strategic goals (Kotler and Keller, 2016). To support the new products or services offered and launches the new products the promotion strategies focus is on promotional activities. The promotional activities can help to discover the level of diffusion of new product on the market (Delre, Jager, Bijmolt and Janssen, 2007). It also help to build and develop a positive corporate image of the companies.

Thus, one of a key component of promotion is advertising and it is mostly one of the recognizable element in integrated marketing communication program (Ferrell and Hartline, 2008). "Advertising is paid, non-personal communication transmitted through media such as televisions, radio, magazines, newspaper, direct email, outdoor displays, the internet and mobile devices" (Ferrell and Hartline, 2008). Followed by the technology advancement, the

internet has become one of the fastest growing medium for advertising, meanwhile, the traditional advert such as newspapers, magazines are most to struggling with limited and no chance to growth through ad revenues. In other word, due to the wide medium of selection for advertising, it is consider as highly flexible form of promotion.

After that, the promotional activities also include knowledge management. The marketing experts more likely to increase the knowledge and intellectual capital form the company in order to define the future “bulletproof” strategies for a certain market. Marketing and knowledge management are both important for good business performance in future (Dordevic, Cockalo and Durin, 2011). It is important for companies to know their weaknesses in order to sustain itself when the market is unstable in future. This can be attain with proper promotion activities that are well prepared, balanced and planned.

2.5.2 The relationship between Promotional Activity and Customer Satisfaction

Kotler and Armstrong (2017), point out that the promotional activities as a key element of the marketing mix. The customer preferences and motivations influence the customer behavior on the market and on their spending (Powers and Loyka, 2010). Through targeted these customers by using the intensive promotional activities. Customers would thoroughly interpret the promotional message and perceive the content of message in many ways. According to Loda (2014), the main message of advertising effects the strength of the customer’s beliefs.

Same with Maulani (2017), in that study found that the marketing tools could cause different perceptions among individuals as well as the customers. Promotional activities can have huge impact on customer experience and effect their satisfaction toward the brand (Bravo Gil, Fraj Andres and Martinez Salinas, 2007). The importance of advertising found in the

findings of Hoban and Bucklin (2015), where in that study analyzed that advertising has impact in developing purchase funnels of the customer.

After that, in Heerde et al. (2013) study have mention that the product price management and advertising is an effective ways to influence consumers. Thus, other study argued that messages from promotional campaigns as well as promotional activities could affect the customers (Vidas-Buban-ja and Bubanja, 2015). Advertising also can be mess up due to disruptions and distraction of consumers and can affect perceived product quality based on early research by Speck and Elliott (1997).

The business objective of a company comes from business or marketing plans and is the goal, which the company is attempting to achieve. The ten core business objectives which promotions typically attempt to address are: increasing volume, increasing trial, increasing repeat purchases, increasing loyalty, widening usage, creating interest, creating awareness, deflecting attention from price, gaining intermediary support, and discriminating among users (Yang, 2014).

2.6 Hypothesis

H1: There is significant relationship between Service Quality and Customer Satisfaction

H2: There is significant relationship between Network Connectivity and Customer Satisfaction

H3: There is significant relationship between Billing & Price and Customer Satisfaction

H4: There is significant relationship between Promotional Activity and Customer Satisfaction

2.7 Research Framework

Independent Variables (IV)

Dependent Variable (DV)

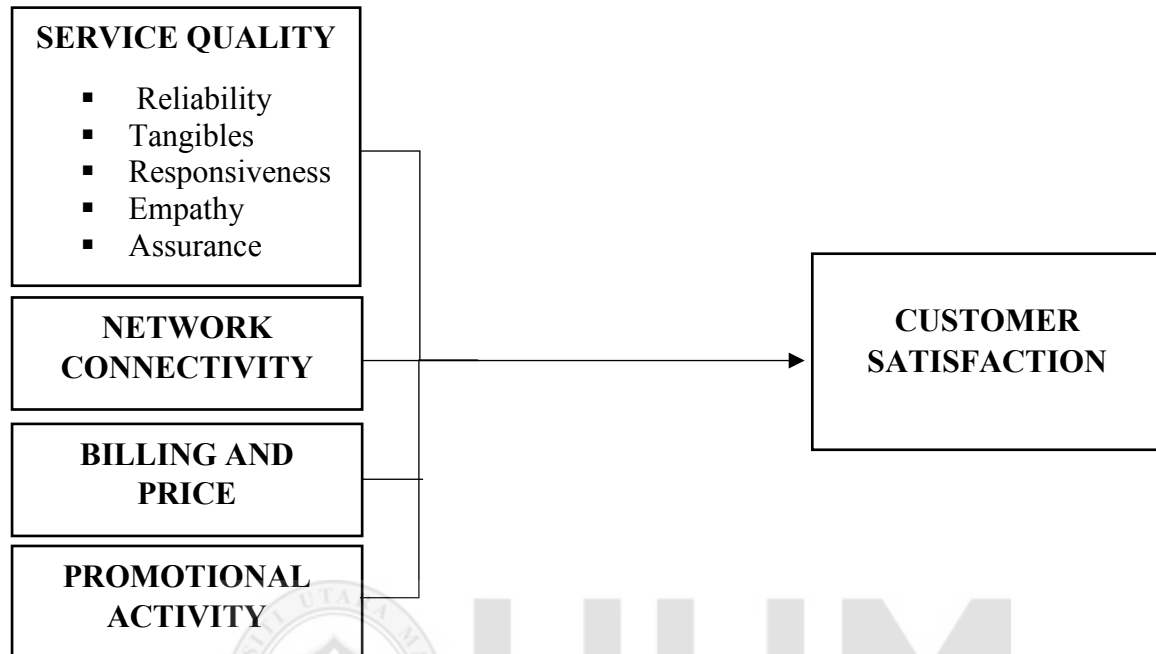


Figure 1 : Research Framework

2.8 Summary

Overall, this chapter described the previous literature and conceptual part related to the variables (service quality, network connectivity, billing and price, promotional activity and customer satisfaction) of the present study. Furthermore, the underpinning theory of this study was discussed to support the research framework. Lastly, the relationship between independent variables (service quality, network connectivity, billing and price and promotional activity) and dependent variable (customer satisfaction) also has been discussed.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This study's main goal is to explore the relationship between the Factors (Service Quality, Network Connectivity, Billing and Price and Promotional Activity) and Customer Satisfaction. This chapter therefore reviews the techniques used to study these relationship. This chapter also, present the methodology used to perform this study, including the research design, theoretical framework, hypothesis, variable measurement and the information about data collection process.

3.1 Research Design

Research design refers to the design plan used to carry out the research project, which includes data analysis, measurement, and data collection in this study (Sekaran and Bougie, 2013). The objective of the research design is to use the best research action to solve the problem by gathering the appropriate information.

This study focused on cross-sectional studies that were conducted only within one time or through certain period to answer the research question (Sekaran and Bougie, 2013). The cross-sectional nature of this study involves testing hypothesis based on the framework that has been place. The data will be collected using survey method where a questionnaire will be use to gather the information. The survey method is popular and mostly being used by researchers to collect descriptive data in a quantitative research. A quantitative research, which involves statistical, mathematical or numerical analysis of data collected. This type of research focuses

on gathering numerical data and generalizing it across different groups of people to explain certain phenomena or situations. In addition, quantitative research also being used to evaluate the research hypothesis and validate the relationship of all the variables in the study (Williams, 2007).

A descriptive study were be conducted in order to confirm the descriptive of the properties in the case of variables of interest. This research intends to test the hypotheses, explain the nature of relationship between the factors that affecting the Customer Satisfaction toward Mobile Service Provider in Malaysia. In this research, survey data obtained from the distributed questionnaire and the quantitative method used to analyze the data. The data analyzed by using the Statistical package for Social Science (SPSS) software version 22.0. Pearson's correlation coefficient is also used to study the relationship between variables and the influences of variables are tested by using multiple regression analysis.

3.1.1 Unit of Analysis

The unit of analysis for this study is individual that consist of male and female. The respondents of this study were the mobile network users or subscribers in the range of age 15 to 40 years old who stay in Kubang Pasu District area. Therefore, data collection process was collected from each individual.

3.1.2 Population and Sample of Study

The population selected for this study was mobile network users or subscribers from age 15 to 40 years old that located in Kubang Pasu District area. The population was determine based on the statistic from Malaysia Communication and Multimedia Commission (MCMC), which stated that the range age from 15 to 40 years old are the major users or subscribers of mobile network in Malaysia. It also selected based on the aim of the study in examine the factors that affecting the customer satisfaction toward mobile

network service provider. The cluster sampling was generated from Department of Statistic Malaysia data. The total population involved in this study was 170,310 people from Kubang Pasu District area that classified based on the range age 15 to 40 years old.

3.1.3 Sample size determination

The sample of this study consisted of 384 mobile users from Kubang Pasu District area randomly selected. For a population of 170,310, this study used a sample size of 384 (Sekaran, 2002). Sekaran (2002) provides comprehensive scientific reference for sample size. Based on Table below, when the population size is $N = 75000$, the sample size is $n = 382$ and when $N = 1000000$, the sample size is $n = 384$. Therefore, the sample of the study should be around 384. The estimated sample size should be selected are shown in Table 3.1.



Table 3. 1 Sample Size for a given Population Size

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

N=Population, S=Sample size (Source: *Sekaran, 2002*)

3.1.4 Sampling Procedure

The sampling procedure used in the present study was convenience-sampling method. The questionnaire have been distributing around 450 numbers of questionnaires using that method. The mobile network service centre such Celcom, Digi, Maxis and U-mobile service centre is the location for the researcher to distribute the questionnaire that covered many places such as service centre at Jitra, Changlun, and UUM. The respondents are suitable for providing data about their view of the services provided by the network providers. However, only 360 out of 450 of questionnaires consider as reusable for this study with response rate of 80%.

3.1.5 Response Rate

For this study, 450 questionnaires were distributed to mobile network users or subscribers that from range age 15 to 40 years old that stay in Kubang Pasu District area. A total of 365 or 81% questionnaires were returned and only 360 or 80% could be used for analysis. Table 3.2 shows the response rate of this study.

Table 3. 2 Response Rate

	No. of Questionnaire	Percentage (%)
Distributed	450	100
Returned	365	81
Usable	360	80

3.1.6 Data Collection

The questionnaire was a self-administered and distributed to all people around randomly in the data collection. The questionnaire was attended by giving the direction in the first page and information about purpose of collect that information in order to help respondents answering accurately. They also informed about their privacy information and data will be covered and used for academic purpose only.

The questionnaire distributed face-to-face and the standard time of range that the respondents take to answer the survey is around 4 to 7 minutes per person. Once completed, the questionnaire was distributed and collected from the respondents immediately. The data collection process have been conducted over the period of two week began 1st October until 14th October 2019.

The questions gather the information about the respondents' feelings about the overall satisfaction toward the Mobile Service Provider Network. The questionnaire also contain all the information that include the respondent identification data and the items that help to analyze the factors. In that questionnaire also told the purpose and assured the confidentiality of response before they answer the question. Most of them inform the researcher after filling the questionnaire form.

3.2 Research Instruments

Questionnaire is one of the appropriate instruments used by researchers in order to collect data from respondents (Zohrabi, 2013). The design of the questionnaire should be simple so that the respondents can easily understand all of the items given to them (Brancato et al., 2004). The items in the questionnaire are created as closed ended question to prevent confusion during interpretation of the respondent's answers. Closed-ended questionnaires are more preferable because they are simpler and can be answer quickly when compared to open-ended questionnaires.

In this study, the questionnaire comprised of 42 questions and it was divided into three part (Part 1, 2, 3). Part One, consisted of the demographic background of respondents, which included gender, ethnicity, age, highest academic qualification, current mobile network and the duration they used that mobile network. Meanwhile, Part 2 is related to direct variable,

Customer Satisfaction toward the mobile service providers followed by Part Three that regarding the factors that affect the Customer Satisfaction; Service Quality, Network Connectivity, Billing and Price and Promotional Activity as indirect variables. In addition, the cover page of the questionnaire gave an overview of the research to the respondents that included the title, purpose of research and some information about the researcher. The summary of items in each variable shown in Table 3.2.

Table 3. 3 Measure of the study

Variables	No of items	Originality	Reported Reliability
Part 1: Demographic Information	6	Gender, ethnicity, age, highest academic qualification, current mobile network, how long used that mobile network.	
Part 2: Customer Satisfaction	5	Levesque and McDougall (1996)	0.92
		Olorunniwo and Hsu (2006)	0.979
Part 3: Factors that affecting the Customer Satisfaction			
1. Service Quality	22	Parasuraman, Zeithaml, and Berry (1988)	0.72 (T), 0.83 (R), 0.82 (R), 0.81 (A), 0.86 (E)
2. Network Connectivity	5	Athanassopoulos and Iliakopoulos (2003)	0.70
		Kim et al. (2004)	0.732
		Page and Spreng (2002)	0.88
3. Billing and Price	5	Levesque and McDougall (1996)	0.701

		Kim et al. (2004)	0.71
		Gilbert et al. (2004)	0.81
4. Promotional Activity	5	Bakator, Đorđević and Ćockalo (2018)	0.87

3.3 Measurement of Variables

For this study, Questionnaire used as a tool containing a short description of the purpose and meaning of the research through distributing questionnaire. The first section consisted of six items to understand the customer's demographics such as gender, ethnicity, and age, highest academic qualification, the current network that their use and years with their corresponding network. It based on nominal scales such as multiple choice.

3.3.1 Customer Satisfaction

Second part based on five items to measure customer satisfaction (dependent variable). All the items were supported with 5-point Likert scale ranging from “1” (Strongly Disagree) to “5” (Strongly Agree). The questionnaire was self-developed but some items regarding customer satisfaction was adapted from the study of (Levesque and McDougall, 1996; Olorunniwo and Hsu, 2006). In this questionnaire, respondents were presented with a list of customer satisfaction action toward mobile network service provider (refer Appendix A), and asked whether and how the providers satisfied the customers. Based on the statement, if the respondent answered “1” or “Strongly disagree” shows the lower score that represent a dissatisfy of the users, meanwhile, if the respondent answered “5” or “Strongly agree” shows high score that represent the customer satisfied.

3.3.2 Service Quality

Third part based on 37 items to measure the factors; Service Quality, Network Connectivity, Billing & Price and Promotional Activity. Service Quality are the first factor been asked in the third part in the questionnaire. The instrument used to measure the first independent variable is service quality. There are 22 items for Service Quality. The items adapted from the SERVQUAL of (Parasuraman, Zeithaml, and Berry, 1988). The participants instructed to indicate the extension of the contract with each item using a 5-point scale from "1" (strongly disagree) to "5" (strongly agree). The respondent who indicates the score of "1" or "Strongly disagree" represented a very bad quality of service, meanwhile the score of "5" or "Strongly agree" represented a very good in term of quality of service by the mobile network service provider.

3.3.3 Network Connectivit

The second factor in the third part is Network Connectivity. There are five items used to measure and analyze this factor. These items adapted from (Athanassopoulos and Iliakopoulos, 2003; Kim et al. 2004; Page and Spreng, 2002). All the items supported with 5-point Likert scale ranging from "1" (Strongly Disagree) to "5" (Strongly Agree). The respondent who indicates the score of "1" or "Strongly disagree" represented a very bad network connection, thus, the score of "5" or "Strongly agree" represented a very good network connection.

3.3.4 Billing and Price

Under the third part, following with the other two factors, the third factor is Billing and Price. There are five items for Billing and Price factor. All the items supported with 5-point Likert scale ranging from "1" (Strongly Disagree) to "5" (Strongly Agree). The questionnaire also self-developed and adapted from the study of (Levesque and McDougall 1996; Kim et al.

2004; Gilbert et al. 2004). The respondent who indicates the score of “1” or “Strongly disagree” represented the bad structure or plan of the provider billing and really bad in term of their offered prices, meanwhile, the score of “5” or “Strongly agree” represented a very good structured of the provider’s billing plan and offered a very good price.

3.3.5 Promotional Activity

After that, the last factors in third part is Promotional Activity. There are five items for this factor. All the items supported with 5-point Likert scale ranging from “1” (Strongly Disagree) to “5” (Strongly Agree). The questionnaire also self-developed but some items are adapted from the study of (Bakator, Đorđević, and Čočkaló, 2018). The respondent who indicates the score of “1” or “Strongly disagree” represented the very bad promotional strategy, meanwhile, the score of “5” or “Strongly agree” represented a very good promotional strategy.

Table 3. 4 Measurement of the Variables

Variables	Items	Sources
Customer Satisfaction (DV)	I am extremely satisfied with my current Mobile service provider	Adapted from (Levesque and McDougall, 1996)
	The Services of my mobile service provider always meet my expectations	Adapted from (Levesque and McDougall, 1996)
	The overall quality of my current mobile service provider is excellent	Adapted from (Levesque and McDougall, 1996)
	I feel that my experience with this mobile service provider has been enjoyable	Adapted from (Levesque and McDougall, 1996)

	I think I did the right thing when I choose this Mobile service provider for its services	Adapted from (Olorunniwo and Hsu, 2006)
Service Quality (IV1)	When the Mobile Network Service Provider promises to do something by a certain time, it does so	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	When you have problems, Mobile Network Service Provider is sympathetic and reassuring	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	Mobile Network Service Provider Company is dependable	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	The Mobile Network Service Provider Company provides its services at the time it promises to do so.	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	The Mobile Network Service Provider Company keeps its records accurately	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	The Mobile Network Service Provider Company does not tell customers exactly when services will be performed	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	You do not receive prompt service from the Mobile Network Service Provider Company's employees.	Adapted from (Parasuraman, Zeithaml and Berry, 1988)

Employees of the Mobile Network Service Provider Company are not always willing to help customers.

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

Employees of the Mobile Network Service Provider Company are too busy to respond to customer requests Promptly.

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

You can trust employees of the Mobile Network Service Provider Company

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

You feel safe in your transactions with Mobile Network Service Provider Company's employees

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

Employees of the Mobile Network Service Provider Company are polite

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

Employees get adequate support from the Mobile Network Service Provider Company to do their jobs well

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

Mobile Network Service Provider Company does not give you individual attention

Adapted from (Parasuraman, Zeithaml and Berry, 1988)

Employees of the Mobile Network Service Provider Company do not give your personal attention

Adapted from (Parasuraman, Zeithaml and Berry, 1988)



	Employees of the Mobile Network Service Provider Company do not know what your needs are	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	Mobile Network Service Provider Company does not have your best interests at heart	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
	Mobile Network Service Provider does not have operating hours convenient to all their customers	Adapted from (Parasuraman, Zeithaml and Berry, 1988)
Network Connectivity (IV2)	It is easy to take up a new mobile phone connection (recharges and top-ups)	Adapted from (Athanassopoulos and Iliakopoulos 2003)
	Service network connects immediately to a dialled number	Adapted from (Page and Spreng, 2002)
	The call quality (voice clarity) is good	Adapted from (Kim et al. 2004)
	The coverage area of the mobile service provider is wide	Adapted from (Kim et al. 2004)
	Service network maintains excellent voice quality and without interruption	Adapted from (Page and Spreng, 2002)
Billing and Price (IV3)	The pricing of the services are reasonable and competitive	Adapted from (Gilbert et al. 2004)

	There is enough variety of pricing plan schedule available	Adapted from (Kim et al. 2004)
	The variety of Value Added Services (SMS, Ringtones etc.) provided is competitive	Adapted from (Kim et al. 2004)
	The billing system is accurately and easy to understand	Adapted from (Levesque and McDougall 1996)
	The customers are freely choosing the price plan schedule	Adapted from (Kim et al. 2004)
Promotional Activity (IV4)	This service network is strongly advertised	Adapted from (Bakator, Dejan and Dragan, 2018)
	The service network spends more on advertising compared to similar brands	Adapted from (Bakator, Dejan and Dragan, 2018)
	This service network often offers promotion deals	Adapted from (Bakator, Dejan and Dragan, 2018)
	I often see ads for this service network on TV	Adapted from (Bakator, Dejan and Dragan, 2018)
	I often encounter ads for this service network on the Internet	Adapted from (Bakator, Dejan and Dragan, 2018)

3.4 Data Analysis Technique

In the statistical analysis, the latest version of Statistical Package for Social Science (SPSS) used. SPSS help to simplify data clearing and to check for logical inconsistencies. The researcher carries out data mining methods before the actual data analysis is performed. To make this study proposal become more explicit, especially the proposed hypothesis, the researcher should include relevant statistical analysis procedures that will be used in testing the hypothesis. Then, the analyzed data will be coded and enter into the computer.

After that, Cronbach alpha coefficients were calculated to investigate the reliability of the instrument. Methods of analysis used in SPSS to test the reliability, factor analysis, t tests, ANOVA, correlation and linear regression analysis. Thus, the descriptive analysis also was used to determine the characteristic of demographic factors such as sex, ethnicity, age, highest academic qualification, current mobile network used, and the duration that customer used that mobile network. The descriptive analysis was conducted to describe the levels of the customer experiences in different kind of perspective such as from point of view as employees and students.

3.5 Chapter Summary

This chapter discussed the methodology that is used in this dissertation based on quantitative approach using structured questionnaire form. This chapter also addresses reliability issues throughout past study result. In addition, this chapter also discussed the population, sample size determination, sampling method, unit of analysis, and the data collection procedure. Apart from explaining the research design, it also provides the explanation about the measurement of variables that consist of the items that used in this study. Finally, this chapter also discussed statistical techniques used such as reliability analysis, descriptive analysis, correlation analysis, regression analysis using SPSS. The result will be discussed in Chapter 4.

CHAPTER FOUR

FINDING

4.0 Introduction

This chapter outlines the results of the analysis of data that was collected from the participants. This research is conducted in term of descriptive study. Chapter 4 also deals with construct assessment of the variables in the main study. Firstly, the main study construct assessment discusses respondent's demographic profiles and purification of the measurement variables. Secondly, the hypothesis testing presented through correlation, linear regression and multiple regressions.

4.1 Descriptive Analysis

Descriptive statistics are the statistics, which describes the phenomena of interest (Loeb et al., 2017). Thus, the demographic background of respondents (mobile network customers or users) were analyzed throughout this study by using descriptive statistics. From the data analysis, the researcher was able to understand the differences among respondent such as gender, ethnicity, age, highest academic qualification, current mobile network that respondents use and how long their used that mobile network.

Table 4. 1Demographic backgrounds of respondent

Demographic Variable	Frequency	Percentage (%)
<u>Gender</u>		
Male	159	44.2
Female	201	55.8
<u>Ethnicity</u>		
Malay	293	81.4
Chinese	27	7.5
Indian	21	5.8
Other	19	5.3
<u>Age</u>		
Under 18 years old	8	2.2
18-24 years old	120	33.3
25-34 years old	157	43.6
35 years or older	75	20.8
<u>Highest academic qualification</u>		
High school graduate, Diploma or the equivalent	89	24.7
Bachelor's degree	149	41.4
Master's degree	95	26.4
Doctorate degree	27	7.5
<u>Current mobile network you used</u>		
Celcom	105	29.2
Maxis	105	29.2
Digi	72	20.0
U-Mobile	47	13.1
Tune Talk	6	1.7
Other	25	6.9

How long you used that mobile network

More than 5 years	161	44.7
1 - 5 years	152	42.2
Less than 1 year	47	13.1

Table 4.1 of the 360 respondents in this research 159 or 44.2% was male and 201 or 55.8% were female. Looking into this result, it shows that there were 42 more woman who responded than man and it also can concluding that mostly customer that frequently visiting area Mobile Service Outlet and actively involved in sharing their experienced as Mobile Network Customer are female as compared to man.

The frequency of the respondents according to their ethnicity also shown in that table. In this study, the majority ethnicity that participated as respondents are Malay, 293 respondents or 81.4% and follow by Chinese, 27 or 7.5% respondents, Indian 21 or 5.8% respondents and Other 19 or 5.3% respondents.

After that, it also shows the extent of age of the respondents by certain range that divided by four types of range. The majority of the respondents are from 25-34 years old, which are 157 people or 43.6% responded. Followed by 18-24 years old respondents 120 or 33.3%, 35 years or older 75 or 20.8% responded and the least respondents are from under 18 years old that only 8 or 2.2%.

Next, the respondent's highest academic qualification. The majority of the respondents had bachelor's degree, which 149 or 41.4% responded, followed by Master's degree 95 or 26.4%, high school graduate, diploma or the equivalent 89 or 24.7%, and lastly respondent that had doctorate degree 27 or 7.5% responded.

As portrayed in Table 4.1, the majority respondent are currently using Celcom and Maxis as their mobile network, which shows same result is 105 or 29.2% responded in this study. Followed by Digi user 72 or 20% responded, U-Mobile 47 or 13.1%, Other network 25 or 6.9% and lastly Tune Talk user 6 or 1.7% only.

The information about the duration of the respondent used their current network also shown that the majority user, 161 or 44.7% are More than 5 years, followed by 152 or 42.2% were used around 1 – 5 years and 47 or 13.1% were used less than 1 year. Most of the respondent considered as the loyalty customer to their current mobile network.

4.2 Reliability Analysis

The purpose of reliability test in a research is to ensure that the study is conducted without bias and achieved the consistency of variables to measure a certain concept (Sekaran, 2013). Cronbach's coefficient alpha was used to test the inter-item consistency for this study. Table 4.2 shows the value of Cronbach's Alpha together with the internal consistency. If the value of Cronbach's alpha is more than 0.7, the consistency is considered as strong.

Table 4. 2 Internal Consistency Measurement

Cronbach Alpha	Internal Consistency
$\alpha=0.9$	Excellent
$\alpha = 0.8 < 0.9$	Good
$\alpha = 0.7 < 0.8$	Acceptable
$\alpha =0.6 < 0.7$	Questionable
$\alpha =0.5 < 0.6$	Poor
$\alpha <0.5$	Unacceptable

Source : Sekaran (2013)

Based on the result shown in Table 4.2, the total number of items measured in this study was 37. Each variable was measured with several number of items. The result showed that Service Quality had achieved the highest Cronbach's Alpha value at 0.985 followed by Billing and Price ($\alpha = 0.966$), Customer Satisfaction ($\alpha = 0.960$), Network Connectivity ($\alpha = 0.936$) and the lowest value was Promotional Activity ($\alpha = 0.744$). The value range is all above 0.7, which is considered as good and acceptable.

Table 4. 3Reliability Test Result

Variables	No items	Cronbach's Alpha
Customer Satisfaction	5	0.960
Service Quality	22	0.985
Network Connectivity	5	0.936
Billing and Price	5	0.966
Promotional Activity	5	0.744

4.3 Mean and Standard Deviation of Data Collection

The means and standard deviations of the dependant variables and independent variables are show in Table 4.4. For this study, the dependent variable is Customer Satisfaction and independent variables are Service Quality, Network Connectivity, Billing and Price and Promotional Activity. The Network Connectivity variable had the highest mean value of 4.1028 and the Billing and Price variable had the lowest mean value of 3.8839.

Table 4. 4Mean and Standard deviation of variables

Variables	Variables	Mean	Standard Deviation
Independent Variables	Service Quality	3.9261	0.45038
	Network Connectivity	4.1028	0.47931
	Billing and Price	3.8839	0.57966
	Promotional Activity	3.9756	0.28804
Dependent Variable	Customer Satisfaction	3.9267	0.47531

4.3.1 Mean and Standard Deviation of Service Quality

The mean and standard deviation of the independent variable of Service Quality shown in Table 4.5. The most dominant factor in measuring the Service Quality was the item “Your Mobile Network Service Provider does not have operating hours convenient to all their customers” which has the mean value of 4.7750. However, the items “When you have problems, your Mobile Network Service Provider is sympathetic and reassuring” had the lowest mean value which was 3.8194.

Table 4. 5Mean and standard deviation (Service Quality)

Items	Mean	Standard Deviation
When the Mobile Network Service Provider promises to do something by a certain time, it does so	3.9139	.43627
When you have problems, Mobile Network Service Provider is sympathetic and reassuring	3.8861	.54423
Mobile Network Service Provider Company is dependable	3.9056	.46847
The Mobile Network Service Provider Company provides its services at the time it promises to do so	3.9139	.38902
The Mobile Network Service Provider Company keeps its records accurately	3.8750	.42674

The Mobile Network Service Provider Company does not tell customers exactly when services will be performed	3.8194	.59540
You do not receive prompt service from the Mobile Network Service Provider Company's employees.	3.9306	.40630
Employees of the Mobile Network Service Provider Company are not always willing to help customers.	3.8639	.50161
Employees of the Mobile Network Service Provider Company are too busy to respond to customer requests Promptly.	3.8444	.60011
You can trust employees of the Mobile Network Service Provider Company	3.8389	.57973
You feel safe in your transactions with Mobile Network Service Provider Company's employees	3.8639	.54932
Employees of the Mobile Network Service Provider Company are polite	3.7944	.73281
Employees get adequate support from the Mobile Network Service Provider Company to do their jobs well	3.8750	.58623
Mobile Network Service Provider Company does not give you individual attention	3.9111	.45142
Employees of the Mobile Network Service Provider Company do not give your personal attention	3.9278	.45439
Employees of the Mobile Network Service Provider Company do not know what your needs are	3.9278	.45439
Mobile Network Service Provider Company does not have your best interests at heart	3.9278	.45439
Mobile Network Service Provider does not have operating hours convenient to all their customers	3.9000	.45524
When the Mobile Network Service Provider promises to do something by a certain time, it does so	3.8806	.48333
When you have problems, Mobile Network Service Provider is sympathetic and reassuring	3.8889	.49385
Mobile Network Service Provider Company is dependable	3.9111	.45754

The Mobile Network Service Provider Company provides its services at the time it promises to do so	4.7750	.69373
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4.3.2 Mean and Standard Deviation of Network Connectivity

Means and standard deviation of items, which used to measure network connectivity shown in Table 4.6. The item “It is easy and convenient to take up a new mobile phone connection as well as get recharges and top-ups” had the highest mean value of 4.8111. Meanwhile, there are two item shows same mean value and it is the lowest, which is 3.8833 and the items are “The Coverage area of the service network is wide” and “Service network maintains excellent voice quality and without interruption”.

Table 4. 6Mean and Standard Deviation (Network Connectivity)

Items	Mean	Standard Deviation
It is easy to take up a new mobile phone connection (recharges and top-ups)	4.8111	.68236
Service network connects immediately to a dialled number	3.9833	.37282
The call quality (voice clarity) is good	3.9528	.36641
The coverage area of the mobile service provider is wide	3.8833	.59031
Service network maintains excellent voice quality and without interruption	3.8833	.59501

4.3.3 Mean and Standard Deviation of Billing and Price

Mean and standard deviation of items that analyzed shown in Table 4.7. The highest mean value was 3.9167, which was for the item “The pricing of the services are reasonable and competitive”. The lowest mean value was the item “The variety of Value Added Services (SMS, Ringtones etc.) provided is competitive”, which indicated the value as 3.8417.

Table 4. 7Mean and Standard Deviation (Billing and Price)

Items	Mean	Standard Deviation
The pricing of the services are reasonable and competitive	3.9167	.60522
There is enough variety of pricing plan schedule available	3.9111	.59980
The variety of Value Added Services (SMS, Ringtones etc.) provided is competitive	3.8417	.68403
The billing system is accurately and easy to understand	3.8889	.60073
The customers are freely choosing the price plan schedule	3.8611	.59491

4.3.4 Mean and Standard Deviation of Promotional Activity

Mean and standard deviation of items, which used to measure Promotional Activity shown in Table 4.8. The items “This service network is strongly advertised” has the highest mean value is 4.0083. Thus, the lowest is “I often see ads for this service network on TV” that had 3.9389 mean value.

Table 4. 8Mean and Standard Deviation (Promotional Activity)

Items	Mean	Standard Deviation
This service network is strongly advertised	4.0083	.30307
The service network spends more on advertising compared to similar brands	3.9611	.44614
This service network often offers promotion deals	3.9667	.36413
I often see ads for this service network on TV	3.9389	.50803
I often encounter ads for this service network on the Internet	4.0028	.39846

4.3.5 Mean and Standard Deviation of Customer Satisfaction

Mean and standard deviation of items to measure Customer Satisfaction is shown in Table 4.9. The items “I am extremely satisfied with my current Mobile service” had the highest mean value of 3.9528 and the lowest mean value is 3.8861 for items “The overall quality of my current mobile service provider is excellent.

Table 4. 9 Mean and Standard Deviation (Customer Satisfaction)

Items	Mean	Standard Deviation
I am extremely satisfied with my current Mobile service provider	3.9528	.47264
The Services of my mobile service provider always meet my expectations	3.9083	.53297
The overall quality of my current mobile service provider is excellent	3.8861	.54423
I feel that my experience with this mobile service provider has been enjoyable	3.9389	.47399
I think I did the right thing when I choose this Mobile service provider for its services	3.9472	.53302

4.4 Hypotheses Testing

This study used correlation analysis and multiple regression analysis for statistics test. The correlation analysis was used to indicate the direction and strength of the relationship between variables measured by using ordinal scale (Sekaran, 2002). Meanwhile, multiple regressions analysis used to test hypotheses that was developed at the beginning of study.

4.4.1 Correlation Analysis

A Pearson correlation analysis is conducted to reveal the strength and significant of the variables and to determine the relationship between the independent and dependent variables (Sekaran, 2013). In addition, the correlation can be explained in term of positive or negative

association. Postive correlation will cause an increasing in one variable and impact factor to increase. The correlation coefficient also was named as 'r' to show the strength of association between Service Quality, Network Connectivity, Billing & Price, Promotional Activity and Customer Satisfaction. The values +1 indicates positive association and -1 indicates negative association. If the value is 0, this means there is no association between variables.

Table 4. 10 Strength of Pearson correlation coefficient

Correlation Indices Size	Interpretation
< 0.20	Very low correlation
0.2 – 0.4	Low correlation
0.4 – 0.6	Moderate Correlation
0.6 – 0.8	High correlation
0.8 – 1.0	Very high correlation

Source : *Guildford (1973)*

4.4.2 The relationship between Service Quality and Customer Satisfaction

The correlation between customer satisfaction and Service Quality shown in Table 4.11. From the table it can be noted that there is a significant correlation between Customer Satisfaction and Service Quality. A significant positive relationship is observed between Customer Satisfaction and Service Quality (0.896). We therefore accept H1, which states that there is a significant relationship between Customer Satisfaction and Service Quality.

Table 4. 11 Correlation between Service Quality and Customer Satisfaction

Variables	Service Quality	
Customer Satisfaction	Pearson Correlation	0.896**
	Sig. (2-tailed)	0.00
	N	360

**Correlation is significant at the 0.01 level (2-tailed)

4.4.3 The Relationship between Network Connectivity and Customer Satisfaction

It can also be seen in table 4.12 that Network Connectivity is positively and significantly correlated with Customer Satisfaction with correlation of 0.867. This value was observed from the data that was gathered from questionnaires answered by respondents. We therefore accept H2, which stated that there is a significant relationship between Customer Satisfaction and Network Connectivity.

Table 4. 12 Correlation between Network Connectivity and Customer Satisfaction

Variables	Network Connectivity	
Customer Satisfaction	Pearson Correlation	0.867**
	Sig. (2-tailed)	0.00
	N	360

** Correlation is significant at the 0.01 level (2-tailed)

4.4.4 The Relationship between Billing and Price and Customer Satisfaction

As shown in Table 4.13, Billing & Price is positively and significantly correlated with customer satisfaction (0.845). In summary, the findings accepted H3, which stated that there is a significant relationship between Customer Satisfaction and Billing & Price.

Table 4. 13 Correlation between Billing and Price and Customer Satisfaction

Variables	Billing & Price	
Customer Satisfaction	Pearson Correlation	0.845**
	Sig. (2-tailed)	0.00
	N	360

** Correlation is significant at the 0.01 level (2-tailed)

4.4.5 The Relationship between Promotional Activity and Customer Satisfaction

As displayed in Table 4.14, the result indicate that there is a significant and positive relationship between Customer Satisfaction and Promotional Activity (0.245). We therefore accept the H4, which stated that there is a significant relationship between Customer Satisfaction and Promotional Activity.

Table 4. 14 Correlation between Customer Satisfaction and Promotional Activity

Variables	Promotion Activity	
Customer Satisfaction	Pearson Correlation	0.245**
	Sig. (2-tailed)	0.00
	N	360

** Correlation is significant at the 0.01 level (2-tailed)

4.5 Hypotheses Summary

Table 4. 15 Summarize of Hypothesis

Hypothesis	Analysis	Result	Supported / Not Supported
H1 There is significant relationship between Service Quality and Customer Satisfaction			Supported
H2 There is significant relationship between Network Connectivity and Customer Satisfaction	Pearson Correlation Analysis	P < 0.01 (Significant)	Supported
H3 There is significant relationship between Billing & Price and Customer Satisfaction			Supported
H4 There is significant relationship between Promotional Activity and Customer Satisfaction			Supported

4.6 Multiple Regression Analysis

Multiple regression analysis used as an analytical tool to examine the influence of determinant factors of customer satisfaction. Multiple regression used to predict variable values based on other variable values. In this study, the researcher want to predict determinants factors of customer satisfaction toward mobile network service provider. Table 4.16 shows the result of Multiple Regression Analysis as below:

Table 4. 16 Result of Multiple Regression Analysis

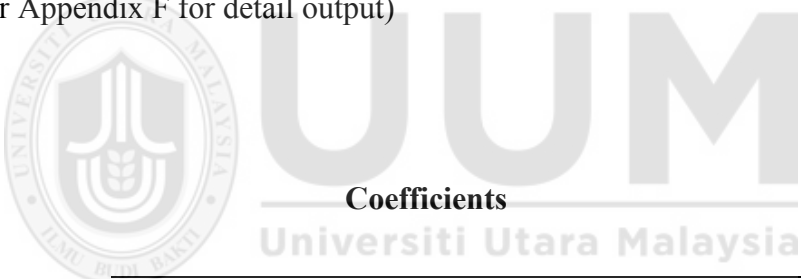
<i>Model Summary</i>		
Model	R	R Square
1	0.905	0.820
<i>ANOVA</i>		
Model	F	Significance
1	403.541	0.000

Significant Value = 0.000

F Value = 403.541

R Square = 0.820

(Please refer Appendix F for detail output)



Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (constant)	-.132	.172		-.771	.441
Service Quality	.721	.065	.684	11.160	.000
Network Connectivity	.060	.089	.061	.672	.502
Billing & Price	.133	.059	.162	2.252	.025
Promotional Activity	.116	.040	.070	2.916	.004

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Based on the above table, the analysis of variance from ANOVA indicated that F statistic produced ($F = 403.541$) is found to be significant ($p = 0.000$) at the level 0.05. Meanwhile, the R Square is 0.820, which are service quality, network connectivity, billing and price and promotional activity as an independent variables indicates 82% of the variance in dependent variable (customer satisfaction).

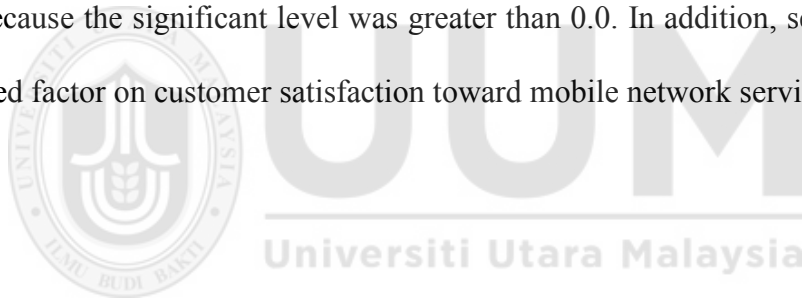
Moreover, the highest Beta coefficient score is service quality with 0.684 followed by billing and price, promotional activity and network connectivity, which are 0.162, 0.70 and 0.61 respectively. Based on multiple regression analysis result, it shows that service quality, billing and price and promotional activity has significant relationship between customer satisfaction, meanwhile, network connectivity is not significant because its significant level is greater than 0.05. Therefore, service quality is the most affected factor on customer satisfaction toward mobile network service provider.



4.7 Summary of Chapter

This chapter provides the statistical result and the interpretation of the findings from the information that was collected. Characteristics of the sample were explained in terms of age, gender, ethnicity, education level and the current mobile network information. The mean and standard deviation of each variable were then analysed. Finally, the result of the correlation between Customer Satisfaction, Service Quality, Network Connectivity, Billing and Price and Promotional Activity were justified and showed significant relationship.

The result from multiple regression analysis shown that the first, third and fourth hypotheses (service quality, billing and price and promotional activity) were accepted with significant level of less than 0.05. Meanwhile, the second hypotheses (network connectivity) was rejected because the significant level was greater than 0.05. In addition, service quality is the most affected factor on customer satisfaction toward mobile network service provider.



CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

This chapter discusses the findings of the study based on the research questions developed as well as different literature reviewed. This chapter structured as follows: first section includes the discussion, followed by the second section on limitation of research. The third section is the recommendation for future study, and finally the fourth section on the conclusion of study. In general, the results confirmed the direct relationship between Independent Variables (Service Quality, Network Connectivity, Billing & Price and Promotional Activity) and Dependent Variable (Customer Satisfaction).

5.1 Discussion of Finding

The following section discussed in detail the factors that affecting the Customer Satisfaction toward Mobile Network service provider. The explanation on the relationship and influences between Independent Variables (Service Quality, Network Connectivity, Billing and Price and Promotional Activity) and Dependent Variable (Customer Satisfaction) were also included. With the result of increased the mobile phone users, it is certainly very advantageous for the providers especially in sustain planning to get customers as many as possible. Most of the telecommunications companies are continually striving to introduce new products and services at a rapid pace in this extremely dynamic communications industry and intense competition. In this study, we used the customer satisfaction measurement to better

understand on how retain the customers based on identifying the factors that affecting the users satisfaction.

5.1.1 The relationship between Service Quality and Customer Satisfaction

Service Quality describe as general evaluation of a service in the services marketing literature. Parasuraman et al. (1985) proposed that the advantages obtained from the quality of service being create and maintained are higher than the costs to obtained be or due to bad performance. In this study, the Pearson correlation analysis confirmed there was a significant relationship between service quality and customer satisfaction with a sig value of 0.00 ($p < 0.01$, Sig. 2-tailed). In addition, the positive value of Pearson correlation with $r = 0.896^{**}$ also indicate a positive relationship between service quality and customer satisfaction. If the service quality of that mobile network is increase, it also can make the satisfied level increasing as well.

Besides, the past research by Lien and Kao (2008) on the effects of service quality dimensions (functional quality; technical quality) on Customer Satisfaction across different service types such as utilitarian and hedonic has revealed that at different services categories have a different effect on customer satisfaction.

The correlation and multi regression analysis showed that the first hypotheses (H1), “there is significant relationship between service quality and customer satisfaction” supported, because service quality significant level is less than 0.02 and 0.05. Munyanti and Masrom (2018) also agree with this hypothesis. In that past study found that, service quality has the highest correlation value rather than the other factors and have high impact on customer satisfaction and suggested the companies should look back their services whether are compatible or not with the price, the quality and also the attitude of the staff that handling their customers.

5.1.2 The relationship between Network Connectivity and Customer Satisfaction

Connecting process been defined in different parts of a network. Connectivity quality in this research network is all about the quality of the area's mobile networking, and connectivity is about the number of errors during the download process and the upload operation. Network connectivity also relates to the network quality or the network signal strength and its quality (Wang, Y., et.al, 2013). In this study, the Pearson correlation analysis confirmed that a significant relationship between network connectivity and customer satisfaction, with a sig value of 0.00 ($p < 0.01$, Sig. 2-tailed). The Pearson correlation had a positive of $r = 0.867^{**}$ which indicate there is a relationship between network connectivity and customer satisfaction. Thus, it is shows that if the performance of network connectivity were good or bad, it would affect the customer satisfaction. However, multi regression analysis shows that this factor are not significant because the significant level is highest than 0.05.

Thus, Rahman (2014) study reveal that the operator's network/signal coverage have significant influence on customer satisfaction. That study discussed that strong signal coverage is key determinants of customer satisfaction; mobile telecommunication build upon a network signal that convey voice call, voice SMS, internet service, information service etc. Providers should be concerned with establishing a strong network signal for promoting value added service has great impact on client satisfaction.

5.1.3 The relationship between Billing and Price and Customer Satisfaction

According to Kotler and Armstrong (2010), for the benefit by customer of having or using the product or service, the price of the amount of money charged for a product or service or the sum of the values exchanged. It is explain the meaning of billing and price in this study context. Thus, the relationship between billing and price and customer satisfaction confirmed

through Pearson correlation analysis, which shows a sig. value 0.00 ($p < 0.01$, Sig. 2-tailed) and the value of $r = 0.845^{**}$ is positive. The multi regression analysis also shows significant relationship between billing and price and customer satisfaction, which it is 0.025 and less than the 0.05 of the significant value.

Hence, the third hypothesis (H3) is supported because both analysis result shows there is significant relationship between billing and price and customer satisfaction. Hanif, Hafeez, and Riaz, (2010) past study also showed the same result, where the researcher argued that both customer services and price fairness are important in creating customer satisfaction. This study view billing and price in term of the fairness pricing that provider offered. Customer satisfaction and price fairness has strong relationship; if price fairness exist then it would add to customer satisfaction. Similarly, customer services and customer satisfaction also have great link, good services would make customers feel more satisfied though price fairness. These independent variables do not only influence dependent variable but also have strong relationship with each other. Price fairness and customer services also complement each other if customers services are good then customers are willing to pay more for the product or service.

It is indicate that there are significant relationship between billing & price and customer satisfaction. The billing and price that being charge by the provider also affect the customer satisfaction.

5.1.4 The relationship between Promotional Activity and Customer Satisfaction

According to Dordevic & Cockalo (2010), promotion is consider as one of the main processes to communicate with the customers. The goal of promotion activity is mainly to increase the profits or the market share. Promotional activities can have huge impact on customer experience and effect their satisfaction toward the brand (Bravo Gil, Fraj Andres & Martinez Salinas, 2007). In this study, the Pearson correlation analysis confirmed that a

significant relationship between promotional activity and customer satisfaction, with sig value of 0.00 ($p < 0.01$, Sig. 2-tailed). The Pearson correlation also had a positive of $r = 0.245^{**}$, which indicate there is a relationship between promotional activity and customer satisfaction. The fourth hypothesis (H4) was supported. This research points to promotional activities as an influencing factor on customer satisfaction. This influence analyzed through other marketing constructs in order to create a better understanding of the subject.

Thus, Bakator, Dejan and Dragan, (2018) also agree with the hypothesis. The past study has argued the influence of promotional activities on customer satisfaction. The regression analysis produced a high R^2 value. Similarly, the correlation analysis showed strong positive correlation between the observed variables. It can be concluded that this suggests a positive relationship between the investigated marketing constructs. Therefore, the auxiliary hypotheses can't be rejected, the main hypothesis "H0: Increasing the intensity of promotional activities, improves customer satisfaction." can't be rejected.

5.2 Implication of the Study

This study moderately contributes to the literature in the domain of customer satisfaction and the factors that can affect the satisfaction toward network providers. The analytical tools that used on the obtained data provided solid results with adequate objectivity on the investigated constructs. Even though there is a large number of studies published on this subject, it stated be safely that this research adds a new approach to consumer analysis.

This study provides a solid basis for future research in this scientific domain. The results may have practical implications for companies, managers and researchers. Companies can address this paper when deciding on new advertising strategies. Managers could use the results of this paper to make informed decisions regarding marketing strategy development. Further,

this paper is convenient for researchers as it offers a concise review, and analysis of important marketing constructs.

5.3 Limitation of the study

As it is commonly with any study, the findings that obtained in the thesis display some shortcomings, these limitations need to recognize when interpreting the findings of this thesis while also recognizing the opportunities that they present for further research in future. Firstly, the data in this study was collected solely from a public in Kubang Pasu District area. This limits the researcher in generalizing the result of the study. Thus, the future studies may consider collecting data from other places that can cover another region of Malaysia.

After that, another limitation is the time constraint. As we are Master student in Universiti Utara Malaysia need to be completed this study only in a few months, we need to do all work in rushing and may cause many errors and mistakes while doing this study. The researcher in future may be fully prepared to do some work earlier rather than usual to avoid time limitation to complete the study.

The third limitation was in using the statistical analysis package to analyze the result. In this study, SPSS was used to analyze all of the collected data. Future researchers should consider using the partial least squares path modeling (PLS-PM) to estimate the cause-effect relationship models between variables. SPSS had its own limitations to analyze very large data sets and there are many different versions of SPSS, making it difficult to determine and learn about each different version.

The final identified limitation was related to the variables in this study. Future research could explore and include more variables regarding this topic other than Service Quality, Network Connectivity, Billing & Price and Promotional Activity such as corporate image or

any variable, which are related to Customer Satisfaction. These another factor are suggested to be added in the research framework for future research.

5.4 Recommendation for Future Study

The future researchers should cover on a wider geographical location and not only focus on the respondents in Kubang Pasu District. The survey form should distributed to the respondents around the country. This is because the sample size gets from area Kubang Pasu cannot represent the whole Malaysian. For instance, the respondents from Kubang Pasu mostly based on the rural area. While the urban area respondents might have different opinions as compare to the respondents in a rural area, on the matter that related to the customer satisfaction towards their mobile network service providers. In order to enhance the generalization of the findings, both areas could also be considered for future study or choose another region as target population.

Lastly, the future researcher should include others variable that might influence the dependent variables. The future researcher must consider the fast changing in the new technology advancement issues. The future researcher must include some related question, which is suitable with the some changes in mobile network service requirement of customer.

5.5 Conclusion

Customer satisfaction is a parameter for measuring profitability of business; higher satisfaction leads to higher sales of merchandise and services generating higher revenues of the business. Particular factors that heighten customer satisfaction have greater concentration of marketers to care about. Considering the above findings, this study contributes to the body of academic knowledge by shedding more light into the choice criteria, which influence

customers' provider selection and future relationship with the mobile network service providers in Malaysia.

At the same time, this study has several implications for customer, as it reveals which service attributes are of most importance for customers and determine their decision of cooperating with the provider. For example, like service quality factors in term of the service innovativeness, service reliability, service competitiveness and service consistency have greater promises to satisfy customers in the mobile telecommunication industry in Malaysia. The service quality factors shows the greatest impact on the customer satisfaction rather than among the three factors (($B = 0.684$, $t = 11.160$, $p < 0.05$). Customer's intension to maximize their service values through innovative services offered by mobile service providers, the degree of newness has greater impact on valuing the customer satisfaction.

Besides, the users demographic of mobile telecommunication service provide valuable insight that, market share of mobile telecommunication changes over the time. Since mobile telecommunication in Malaysia can be, consider as matured, increase in market share of one operators refers to loss of share of other operators. The study reveals that most of the mobile telecommunication service users have multiple operators' connections, indicates low switching cost and higher customer autonomy. Therefore, customer satisfaction remains key diver of maintaining market share in competitive business environment. Thus, ease of access of service, price and strong network connection should be take into consideration for promoting customer satisfaction in mobile telecommunication service.

By introducing more training course to the employees is one of the strategies to increase the level of customer satisfaction. The contents shall include the manner when serve the customers, ways to communicate to the customer, and enhance the knowledge on the product and service that introduce by the mobile network provider.

REFERENCES

- Adebiyi, S. O., Shitta, H. A., & Olonade, O. P. (2016). Determinants of customer preference and satisfaction with Nigerian mobile telecommunication services. *BVIMSR's Journal of Management Research*, 8(1), 1.
- Anderson, E. W., & Fornell, C. (1993). Firm, industry and national indices of customer satisfaction. Implications for services. *Advances in services marketing and management*, 2, 87-108.
- Anderson, E. W., Fornell, C., & Mazvancheryl, S. K. (2004). Customer satisfaction and shareholder value. *Journal of marketing*, 68(4), 172-185. Doi:<https://doi.org/10.1509%2Fjmk.68.4.172.42723>
- Athanassopoulos, A. D., & Iliakopoulos, A. (2003). Modeling customer satisfaction in telecommunications: Assessing the effects of multiple transaction points on the perceived overall performance of the provider. *Production and Operations Management*, 12(2), 224-245. DOI:<https://doi.org/10.1111/j.1937-5956.2003.tb00502.x>
- Bahia, K, Suardi, S. (2019). The State of Mobile Internet Connectivity 2019. GSM Association. Retrieved from: <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/GSMA-State-of-Mobile-Internet-ConnectivityReport2019.pdf>
- Bakator, M., Đorđević, D., & Čockalo, D. (2018). Promotional activities and customer satisfaction: Long-term influence or a temporary marketing'mirage'?. *Marketing*, 49(2), 113-123. DOI: 10.5937/markt802113B
- Bitner, M.J., Booms, B.H. and Mohr, L.A. (1994) 'Critical service encounters: the employee viewpoint'. *Journal of Marketing*, 58(4), pp.95–106. DOI: <https://doi.org/10.1177%2F002224299405800408>
- Chen, A., Lu, Y., Gupta, S., & Qi, X. (2014). Can customer satisfaction and dissatisfaction coexist? An issue of telecommunication service in China. *Journal of Information Technology*, 29, 237-252. DOI: <http://dx.doi.org/10.1057/jit.2013.26>
- Day, S., Hsueh, S., Liggett, R., & Ren, R. (2001). Wireless/Cellular customer service: Service with a smile. *Berkeley: University of California School of Information Management and Systems*.
- De Ruyter, K., Bloemer, J., & Peeters, P. (1997). Merging service quality and service satisfaction. An empirical test of an integrative model. *Journal of economic psychology*, 18(4), 387-406. [https://doi.org/10.1016/S0167-4870\(97\)00014-7](https://doi.org/10.1016/S0167-4870(97)00014-7)
- Eshghi, A., Haughton, D., & Topi, H. (2007). Determinants of customer loyalty in the wireless telecommunications industry. *Telecommunications policy*, 31(2), 93-106. DOI:<https://doi.org/10.1016/j.telpol.2006.12.005>

- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of marketing*, 60(4), 7-18. <https://doi.org/10.1177%2F002224299606000403>
- Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of marketing*, 69(4), 210-218. <https://doi.org/10.1509%2Fjmk.2005.69.4.210>
- Ghylin, K. M., Green, B. D., Drury, C. G., Chen, J., Schultz, J. L., Uggirala, A., ... & Lawson, T. A. (2008). Clarifying the dimensions of four concepts of quality. *Theoretical Issues in Ergonomics Science*, 9(1), 73-94. [Doi:https://doi.org/10.1080/14639220600857639](https://doi.org/10.1080/14639220600857639)
- Gilbert, G. R., Veloutsou, C., Goode, M. M., & Moutinho, L. (2004). Measuring customer satisfaction in the fast food industry: a cross-national approach. *Journal of Services Marketing*, 18(5), 371-383. <https://doi.org/10.1108/08876040410548294>
- Guterman, Y. (2015). Customer satisfaction evaluation and recommendations for a marketing communication. *Business Management University of Applied Sciences*. Retrieved from: <https://pdfs.semanticscholar.org/de3a/b70ef11bba42d4bb95142b51516e16b0cf5.pdf>
- Hanif, M., Hafeez, S., & Riaz, A. (2010). Factors affecting customer satisfaction. *International research journal of finance and economics*, 60(1), 44-52. Retrieved from: <http://www.eurojournals.com/finance.htm>
- Haque, A., Ahmed, I., & Rahman, S. (2007). Exploring critical factors for choice of Mobile service providers and its effectiveness on Malaysian Consumers. *Journal of International Business and Economics*, 2(2), 84-96.
- Haque, A., Khatibi, A., Raquib, A., & Al Mahmud, S. (2007). Consumer perception and its choice mobile telecom service provider in Malaysia. *Journal of International Business and Economics*, 7(2), 84. Retrieved from <http://www.freepatentsonline.com/article/JournalInternationalBusinessEconomics/178945898.html>.
- Herrmann, A., Xia, L., Monroe, K. B., & Huber, F. (2007). The influence of price fairness on customer satisfaction: an empirical test in the context of automobile purchases. *Journal of product & brand management*, 16(1), 49-58. <https://doi.org/10.1108/10610420710731151>
- Johnson, M. D., & Fornell, C. (1991). A framework for comparing customer satisfaction across individuals and product categories. *Journal of economic psychology*, 12(2), 267-286. [https://doi.org/10.1016/0167-4870\(91\)90016-M](https://doi.org/10.1016/0167-4870(91)90016-M)

- Johnson, W. C., & Sirikit, A. (2002). Service quality in the Thai telecommunication industry: a tool for achieving a sustainable competitive advantage. *Management Decision*, 40(7), 693-701. <https://doi.org/10.1108/00251740210438526>
- Khan, S., & Afsheen, S. (2012). Determinants of Customer Satisfaction in Telecom Industry: A Study of Telecom industry Peshawar KPK Pakistan. *Journal of Basic and Applied Scientific Research*, 2(12), 12833-12840.
- Kim, M. K., Park, M. C., & Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. *Telecommunications policy*, 28(2), 145-159. DOI:<https://doi.org/10.1016/j.telpol.2003.12.003>
- Kotler, P., & Keller, K. L. (2006). *Marketing Management* (Twelfth Edition).
- Kotler, P., & Armstrong, G. (2006). *Principles of marketing* 11th ed.
- Kotler, Philip, Keller, Kevin Lane (2011). *Marketing Management*. 14th Edition. Pearson Education
- Levesque, T., & McDougall, G. H. (1996). Determinants of customer satisfaction in retail banking. *International journal of bank marketing*, 14(7), 12-20. <https://doi.org/10.1108/02652329610151340>
- Lien, N. and Kao, S. (2008). "The Effects of Service Quality Dimensions on Customer Satisfaction ACross Different Service Types: Alternative Differentiation As a Moderator". *NA - Advances in Consumer Research*, 35, pp.522-26. Retrieved from: http://www.acrwebsite.org/volumes/v35/naacr_vol35_488.pdf
- Malaysia Communication and Multimedia Commission, Consumer Satisfaction Survey, 2010. Retrieved from: https://www.skmm.gov.my/skmmgovmy/media/General/pdf/Consumer_Satisfaction_survey_2.pdf
- Malaysia Communication and Multimedia Commission, Consumer Satisfaction Survey, 2011. Retrieved from: https://www.skmm.gov.my/skmmgovmy/media/General/pdf/CSS_Report_2011.pdf
- Malaysia Communication and Multimedia Commission, Internet Users Survey, 2018. Retrieved from: https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Internet_Users-Survey-2018.pdf
- Martín-Consuegra, D., Molina, A., & Esteban, Á. (2007). An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. *Journal of Product & Brand Management*, 16(7), 459-468. <https://doi.org/10.1108/10610420710834913>

- Munyanti, I., & Masrom, M. (2018). Customer Satisfaction Factors towards Mobile Network Services. *Journal of Advanced Research in Business and Management Studies*, 13(1), 9-18. Retrieved from: www.akademiabaru.com/arbms.html
- Mishra, A. R. (2004). Fundamentals of cellular network planning and optimisation. *Evolution to. Wiley Interscience*.
- Molina, A., Martin, D. and Esteban, A. (2007). "Relational benefits and customer satisfaction in retail banking", *International Journal of Bank Marketing*, Vol. 25, No. 4, pp. 253-271.
- Moenreo, K. B. (1990). *Princing: Making Profitable Decision*.
- Munusamy, J., Chelliah, S., & Hor, W. M. (2010). Service Quality Delivery and Its Impact on Customer Satisfaction in the Banking Sector in Malaysia. *International Journal of Innovation, Management and Technology*, 1, 168-174. reference. 11.0 update(4th ed.). Boston: Allyn & Bacon. Retrived form: <http://www.ijimt.org/papers/71M461.pdf>
- Ojo, O. (2010). The relationship between service quality and customer satisfaction in the telecommunication industry: Evidence from Nigeria. *BRAND. Broad Research in Accounting, Negotiation, and Distribution*, 1(1), 88-100. Retrieved from: <http://www.edusoft.ro/brain/index.php/brand/article/view/121>
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of consumer research*, 20(3), 418-430. Doi:<https://doi.org/10.1086/209358>
- Oliver, R. L. (2007). Customer satisfaction research, in R. Grover, M. Vriens (Eds.). *The handbook of marketing research: uses, misuses, and future advances*. Thousand Oaks, CA: Sage, 569-587. <http://dx.doi.org/10.4135/9781412973380.n27>
- Olorunniwo, F., & Hsu, M. K. (2006). A typology analysis of service quality, customer satisfaction and behavioral intentions in mass services. *Managing Service Quality: An International Journal*, 16(2), 106-123. <https://doi.org/10.1108/09604520610650600>
- Owiye, E. (2012). Analysis of customer satisfaction in the mobile telecommunications industry in Kenya: a case study of customers in Mlolongo area. *Unpublished MBA research project. University of Nairobi*.
- Parasuraman A., V. A. Z., Leonard L. Berry. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(Fall), 41-50.
- Parasuraman A., V. A. Z., Leonard L. Berry. (1988). SERVQUAL: A Multi-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1991) 'Refinement and reassessment of the SERVQUAL scale'. *Journal of Retailing*, 67(4), pp.420-450.

- Parasuraman, A., V. A. Z., Leonard L. Berry. (1994). Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria. *Journal of Retailing*, 70(3), 201-230.
- Rahman, H. (2014). Factors affecting customer satisfaction in mobile telecommunication industry in Bangladesh. *Business, Management and Education*, 12(1), 74-93. Retrieved from: <https://www.cceol.com/search/article-detail?id=155163>
- Santouridis, I., & Trivellas, P. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330-343.
- Sateriou, S. B and Chase, H. V. (2000). "Relative importance of service quality dimensions: a multisectoral study". *Journal of Service Research*, 4(1), (April-September 2004).
- Sekaran, U. (2000). *Research for Business: A Skill-Building Approach*. John Wiley.
- Sekaran, U., & Bougie, R. (2013). Edisi 6. Research Methods for Business.
- Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). The relationship between management's perception of total quality service and customer perceptions of service quality. *Total Quality Management*, 13(1), 69-88. DOI:<https://doi.org/10.1080/09544120120098573>
- Tutela (2019). State of Mobile Network February 2019, Southeast Asia. Retrieved from: <https://www.malaysianwireless.com/wp-content/uploads/2019/02/Tutela-Southeast-Asia-State-of-Mobile-Networks-Report-February-2019.pdf>
- Voss, G. B., Parasuraman, A., & Grewal, D. (1998). The roles of price, performance, and expectations in determining satisfaction in service exchanges. *Journal of marketing*, 62(4), 46-61. DOI:<https://doi.org/10.1177/002224299806200404>
- Wang, Y., Wu, J., & Yang, Z. (2013). Customer participation and project performance: The mediating role of knowledge sharing in the Chinese telecommunication service industry. *Journal of Business-to-Business Marketing*, 20(4), 227-244.
- Wen, C. H., & Hilmi, M. F. (2011, December). Exploring service quality, customer satisfaction and customer loyalty in the Malaysian mobile telecommunication industry. In *2011 IEEE Colloquium on Humanities, Science and Engineering*, 733-738, IEEE. Doi: <https://doi.org/10.1109/CHUSER.2011.6163832>
- Yang, Z. (2009). The impact of promotional activities on customer purchasing behaviour at Tesco Lotus. DOI: <http://dspace.bu.ac.th/handle/123456789/544>
- Yeoh, A. (2019, March 28). CFM received over 6,000 complaints on communications and multimedia services in 2018. *The Star Online*. Retrieved from: <https://www.thestar.com.my/tech/tech-news/2019/03/28/cfm-complaints-increase>
- Zajac, E.J, Kraatz, C and Bresser, R. K. F. (2000). Service quality perspective and satisfaction in private banking". *Journal of Service Marketing*. Vol. 14, No. 3, pp. 244-271.

Zeithaml, V. A., Bitner, M. J., & Drenler, D. (1996). *Services Marketing*, international edition. New York, NY and London: McGraw Hill.

Zeithaml, V. A., Bitner, M. J., (2000). *Service Marketing, Integrating Customer Focus Across The Firm*.



APPENDIX (A): Questionnaire



UNIVERSITI UTARA MALAYSIA

Dear respective respondents,

I am a master degree candidate at College of Business, Universiti Utara Malaysia (UUM). I am conducting a study about the Factors that effecting the Customer Satisfaction toward Mobile Network Service Provider. This study are compulsory for me to complete my study. The main objective of this research is to find the factors that can affect the mobile user satisfaction toward Mobile Network Provider that provided especially in Malaysia. Therefore, I would really appreciate it if you could spend a few minutes answering this questionnaire. Information that given will be kept confidential and used purely for academic purposes only. This questionnaire consists of three (3) parts. Please answer all the questions accordingly. If you have any inquiries, please do not hesitate to contact me. Thank you for your time and cooperation.

Yours sincerely,

Iin Adriana Binti Nasri

Master of Science (Management), School of Business Management,

College of Business, 06010 UUM Sintok, Kedah.

Email: iin_adriana@ymail.com



UNIVERSITI UTARA MALAYSIA

Responden yang dihormati,

Saya ialah seorang calon sarjana dari Kolej Perniagaan, Universiti Utara Malaysia (UUM). Saya sedang menjalankan kajian tentang Faktor yang mempengaruhi Kepuasan Pelanggan terhadap Rangkaian Mudah Alih yang di gunakan. Kajian ini adalah wajib untuk memenuhi syarat pengajian saya. Objektif utama penyelidikan ini adalah untuk mengetahui Faktor-faktor yang mempengaruhi kepuasan pelanggan terhadap Syarikat Rangkaian Mudah Alih yang ditawarkan khususnya di Malaysia. Oleh itu saya sangat menghargai sekiranya anda boleh meluangkan masa beberapa minit untuk menjawab soal selidik ini. Maklumat yang diberikan adalah rahsia dan digunakan semata-mata untuk tujuan akademik sahaja. Soal selidik ini terdiri daripada tiga bahagian. Sila jawab semua soalan dengan sewajarnya. Jika anda mempunyai sebarang pertanyaan, jangan ragu-ragu untuk menghubungi saya. Terima kasih kerana masa dan kerjasama anda.

Yang ikhlas,

Iin Adriana Binti Nasri

Master of Science (Management), School of Business Management,

College of Business, 06010 UUM, Sintok, Kedah.

Email: iin_adriana@ymail.com

THE QUESTIONNAIRE / SOAL SELIDIK

Please read all instructions and ANSWER all questions carefully. Please tick (✓) for the answers that best describe your demographic information in the box provided.

(Sila baca semua arahan dan JAWAB semua soalan dengan teliti). Sila tandakan (✓) untuk jawapan yang paling tepat menggambarkan maklumat demografi anda di dalam kotak yang disediakan.).

PART 1: Demographic Information / Maklumat Demografik

1. Gender / Jantina:

☐

Male / *Lelaki*

☐

Female / *Perempuan*

2. Ethnicity / Etnik:

☐

Malay / *Melayu*

☐

Chinese / *Cina*

☐

Indian / *India*

☐

others / *lain-lain*

: Please specify

3. Age / Umur:

☐

Under 18 years old / *Bawah umur 18 tahun*

☐

18-24 years old / *Umur 18-24 tahun*

☐

25-34 years old / *Umur 25-34 tahun*

☐

35 years or older / *Umur 35 tahun atau lebih*

4. Highest Academic Qualification / Kelayakan Akademik Tertinggi:

☐

High school graduate, diploma or the equivalent / *Lulusan Sekolah Menengah, Diploma atau setaraf*

☐

Bachelor's degree / *Ijazah Sarjana Muda*

☐

Master's degree / *Ijazah Sarjana*

☐

Doctorate degree / *Phd*

5. Current mobile network you used / Rangkaian mudah alih semasa yang anda gunakan:

☐

Celcom

☐

U- Mobile

☐

Maxis

☐

Tune Talk

☐

Digi

☐

Other: Please specify ...

6. How long you used that mobile network. / Berapa lama anda menggunakan rangkaian mudah alih itu:

☐

More than 5 years / *lebih dari 5 tahun*

☐

1 - 5 years

☐

Less than 1 year / *kurang dari 1 tahun*



UUM
Universiti Utara Malaysia

PART 2: CUSTOMER SATISFACTION / Kepuasan Pelanggan.

Please **CIRCLE** the number according to the scale given in the box to indicate the extent to which answer that best represents your views with the following statements.

(Sila **bulatkan** nombor mengikut skala yang diberikan di dalam kotak untuk menunjukkan sejauh mana kenyataan berikut jawapan yang paling menggambarkan pandangan anda)

1	2	3	4	5
Strongly Disagree / <i>Sangat Tidak Setuju</i>	Disagree / <i>Tidak Setuju</i>	Neutral	Agree / Setuju	Strongly Agree / <i>Sangat Setuju</i>

No.	Statement / Pernyataan	Scale / Skala				
1	I am extremely satisfied with my current Mobile service. (Saya sangat berpuas hati dengan rangkaian perkhidmatan mudah alih semasa saya)	1	2	3	4	5
2	The Services of my mobile service provider always meet my expectations. (Rangkaian perkhidmatan mudah alih saya sentiasa memenuhi jangkaan saya)	1	2	3	4	5
3	The overall quality of my current mobile service provider is excellent. (Kualiti keseluruhan rangkaian perkhidmatan mudah alih semasa saya adalah sangat baik)	1	2	3	4	5
4	I feel that my experience with this mobile service provider has been enjoyable. (Saya merasakan pengalaman saya dengan rangkaian perkhidmatan mudah alih ini adalah menyenangkan)	1	2	3	4	5
5	I think I did the right thing when I choose this Mobile Network service provider for its services.					

	(Saya fikir saya melakukan perkara yang betul apabila saya memilih rangkaian perkhidmatan mudah alih ini untuk perkhidmatannya)	1	2	3	4	5
--	---	---	---	---	---	---

PART 3: Factors that affecting the Customer Satisfaction / Faktor yang mempengaruhi Kepuasan Pelanggan

Please **CIRCLE** the number according to the scale given in the box to indicate the extent to which answer that best represents your views with the following statements.

(Sila **bulatkan** nombor mengikut skala yang diberikan di dalam kotak untuk menunjukkan sejauh mana kenyataan berikut jawapan yang paling menggambarkan pandangan anda)

I) SERVICE QUALITY / Kualiti Servis

No.	Statement / Pernyataan	Scale / Skala				
1	Your Mobile Network Service Provider outlet Customer Service Center has up-to-date equipment. (Pusat Servis Pelanggan Rangkaian Perkhidmatan Mudah Alih anda mempunyai alatan yang terkini)	1	2	3	4	5
2	Your Mobile Network Service Provider outlet Customer Service Center's physical facilities are visually appealing. (Pusat Servis Pelanggan Rangkaian Perkhidmatan Mudah Alih anda mempunyai kemudahan fizikal yang menonjol)	1	2	3	4	5
3	Your Mobile Network Service Provider outlet Customer Service Center's employees are well dressed and appear neat.	1	2	3	4	5

	<i>(Pekerja di Pusat Servis Pelanggan Rangkaian Perkhidmatan Mudah Alih anda adalah berpenampilan baik dan kemas)</i>					
4	The appearance of the physical facilities of your Mobile Network Service Provider outlet of Customer Service Center is in keeping with the type of services provided. <i>(Kemudahan fizikal di Pusat Servis Pelanggan Rangkaian Perkhidmatan Mudah Alih anda adalah sesuai dengan jenis servis yang di berikan)</i>	1	2	3	4	5
5	When the Mobile Network Service Provider promises to do something by a certain time, it does so. <i>(Apabila Rangkaian Perkhidmatan Mudah Alih itu menjanjikan sesuatu pada masa tertentu, ia akan berbuat demikian)</i>	1	2	3	4	5
6	When you have problems, your Mobile Network Service Provider is sympathetic and reassuring. <i>(Apabila anda mempunyai masalah, Rangkaian Perkhidmatan Mudah Alih anda akan bersimpati dan meyakinkan anda)</i>	1	2	3	4	5
7	Your Mobile Network Service Provider is dependable. <i>(Rangkaian Perkhidmatan Mudah Alih anda boleh dipercayai)</i>	1	2	3	4	5
8	This Mobile Network Service Provider provides its services at the time it promises to do so. <i>(Rangkaian Perkhidmatan Mudah Alih ini menyediakan perkhidmatannya pada masa yang telah dijanjikan)</i>	1	2	3	4	5
9	This Mobile Network Service Provider keeps its records accurately. <i>(Rangkaian Perkhidmatan Mudah Alih ini menyimpan rekodnya dengan tepat sekali)</i>	1	2	3	4	5

10	This Mobile Network Service Provider does not tell customers exactly when services will be performed. <i>(Rangkaian Perkhidmatan Mudah Alih ini tidak memberitahu pelanggan bila perkhidmatan akan dilaksanakan)</i>	1	2	3	4	5
11	You do not receive prompt service from the Mobile Network Service Provider's employees. <i>(Anda tidak menerima perkhidmatan secara segera daripada pekerja yang bekerja di Rangkaian Perkhidmatan Mudah Alih ini)</i>	1	2	3	4	5
12	Employees of your Mobile Network Service Provider are not always willing to help customers. <i>(Pekerja Rangkaian Perkhidmatan Mudah Alih anda tidak selalu bersedia untuk membantu pelanggan)</i>	1	2	3	4	5
13	Employees of your Mobile Network Service Provider are too busy to respond to customer requests Promptly. <i>(Pekerja di Rangkaian Perkhidmatan Mudah Alih anda terlalu sibuk untuk memberi respons kepada permintaan pelanggan secara segera)</i>	1	2	3	4	5
14	You can trust employees of your Mobile Network Service Provider. <i>(Anda boleh dipercayai pekerja di Rangkaian Perkhidmatan Mudah Alih anda)</i>	1	2	3	4	5
15	You feel safe in your transactions with your Mobile Network Service Provider's employees. <i>(Anda merasa selamat melakukan urusan niaga dengan pekerja Rangkaian Perkhidmatan Mudah Alih anda)</i>	1	2	3	4	5
16	Employees of your Mobile Network Service Provider are polite. <i>(Pekerja Rangkaian Perkhidmatan Mudah Alih anda adalah sopan)</i>	1	2	3	4	5

17	Employees get adequate support from the Mobile Network Service Provider to do their jobs well. <i>(Pekerja mendapat sokongan yang mencukupi daripada Syarikat Rangkaian Perkhidmatan Mudah Alih tersebut untuk melakukan pekerjaan mereka dengan baik)</i>	1	2	3	4	5
18	Your Mobile Network Service Provider does not give you individual attention. <i>(Rangkaian Perkhidmatan Mudah Alih anda tidak memberikan perhatian secara individu kepada anda)</i>	1	2	3	4	5
19	Employees of your Mobile Network Service Provider do not give your personal attention. <i>(Pekerja Rangkaian Perkhidmatan Mudah Alih anda tidak memberikan perhatian secara peribadi kepada anda)</i>	1	2	3	4	5
20	Employees of your Mobile Network Service Provider do not know what your needs are. <i>(Pekerja Rangkaian Perkhidmatan Mudah Alih anda tidak tahu apa anda perlukan)</i>	1	2	3	4	5
21	Your Mobile Network Service Provider does not have your best interests at heart. <i>(Rangkaian Mudah Alih anda tidak mempunyai kepentingan kepada anda)</i>	1	2	3	4	5
22	Your Mobile Network Service Provider does not have operating hours convenient to all their customers. <i>(Rangkaian Perkhidmatan Mudah Alih anda tidak mempunyai waktu operasi yang sesuai untuk semua pelanggan mereka)</i>	1	2	3	4	5

II) NETWORK CONNECTIVITY / Sambungan Rangkaian

No.	Statement / Pernyataan	Scale / Skala				
1	It is easy and convenient to take up a new mobile phone connection as well as get recharges and top-ups. <i>(Ia senang dan mudah untuk membuat sambungan telefon mudah alih yang baru serta mendapatkan pengisian semula dan tambah nilai)</i>	1	2	3	4	5
2	Service network connects immediately to a dialed number. <i>(Rangkaian perkhidmatan menghubungkan segera ke nombor yang didail)</i>	1	2	3	4	5
3	The call quality (voice clarity) is good and call drops are minimal. <i>(Kualiti panggilan (kejelasan suara) adalah baik dan gangguan semasa panggilan adalah minimum)</i>	1	2	3	4	5
4	The Coverage area of the service network is wide. <i>(Kawasan liputan rangkaian perkhidmatan adalah luas)</i>	1	2	3	4	5
5	Service network maintains excellent voice quality and without interruption. <i>(Rangkaian perkhidmatan ini mengekalkan kualiti suara yang sangat baik dan tanpa gangguan)</i>	1	2	3	4	5

III) BILLING & PRICE / Pengebilan & Harga

No.	Statement / Pernyataan	Scale / Skala				
1	The pricing of the services are reasonable and competitive. <i>(Harga yang dikenakan untuk servis adalah wajar dan boleh bersaing)</i>	1	2	3	4	5

2	There is enough variety of pricing plan schedule available. <i>(Mempunyai kepelbagaian yang cukup dalam jadual pelan harga yang sedia ada)</i>	1	2	3	4	5
3	The variety of Value Added Services (SMS, Ringtones etc.) provided is competitive. <i>(Kepelbagaian dalam servis tambahan (SMS, Nada dering etc.) yang diberikan mampu bersaing)</i>	1	2	3	4	5
4	The billing system is accurately and easy to understand. <i>(Sistem pembayaran adalah bertepatan dan senang untuk difahami)</i>	1	2	3	4	5
5	The customers are freely choosing the price plan schedule that they want. <i>(Pelanggan bebas untuk memilih jadual pelan harga yang diinginkan)</i>	1	2	3	4	5

IV) PROMOTIONAL ACTIVITY / Aktiviti Promosi

No.	Statement / Pernyataan	Scale / Skala				
1	This service network is strongly advertised <i>(Rangkaian perkhidmatan ini sering diiklankan)</i>	1	2	3	4	5
2	The service network spends more on advertising compared to other similar service network <i>(Rangkaian perkhidmatan ini berbelanja lebih untuk pengiklanan berbanding rangkaian perkhidmatan lain yang sama)</i>	1	2	3	4	5
3	This service network often offers promotion deals <i>(Rangkaian perkhidmatan ini sering menawarkan tawaran promosi)</i>	1	2	3	4	5
4	I often see ads for this service network on TV <i>(Saya sering melihat iklan rangkaian perkhidmatan ini di TV)</i>	1	2	3	4	5

5	I often encounter ads for this service network on the Internet <i>(Saya sering melihat iklan rangkaian perkhidmatan ini di Internet)</i>	1	2	3	4	5
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END OF QUESTIONNAIRE / SOAL SELIDIK TAMAT

THANK YOU / TERIMA KASIH



APPENDIX (B): Respondents Profile

Ethnicity					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	293	81.4	81.4	81.4
	Chinese	27	7.5	7.5	88.9
	Indian	21	5.8	5.8	94.7
	Other	19	5.3	5.3	100.0
	Total	360	100.0	100.0	

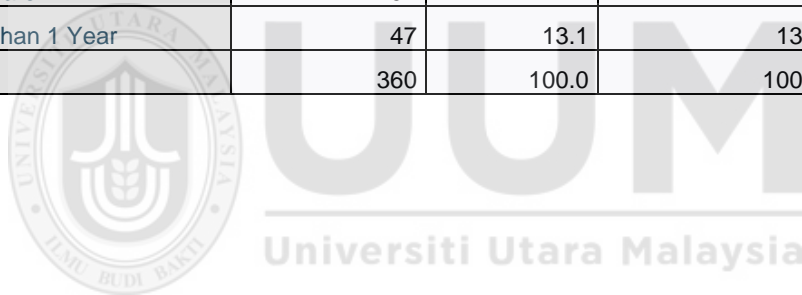
Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	159	44.2	44.2	44.2
	Female	201	55.8	55.8	100.0
	Total	360	100.0	100.0	

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 18 Years old	8	2.2	2.2	2.2
	18-24 Years old	120	33.3	33.3	35.6
	25-34 Years old	157	43.6	43.6	79.2
	35 Years or older	75	20.8	20.8	100.0
	Total	360	100.0	100.0	

Highest Academic Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School Graduate, Diploma or the equivalent	89	24.7	24.7	24.7
	Bachelor's degree	149	41.4	41.4	66.1
	Master's Degree	95	26.4	26.4	92.5
	Doctorate Degree	27	7.5	7.5	100.0
	Total	360	100.0	100.0	

Current_Mobile_Network_you_used					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Celcom	105	29.2	29.2	29.2
	Maxis	105	29.2	29.2	58.3
	Digi	72	20.0	20.0	78.3
	U-Mobile	47	13.1	13.1	91.4
	Tune Talk	6	1.7	1.7	93.1
	Others	25	6.9	6.9	100.0
	Total	360	100.0	100.0	

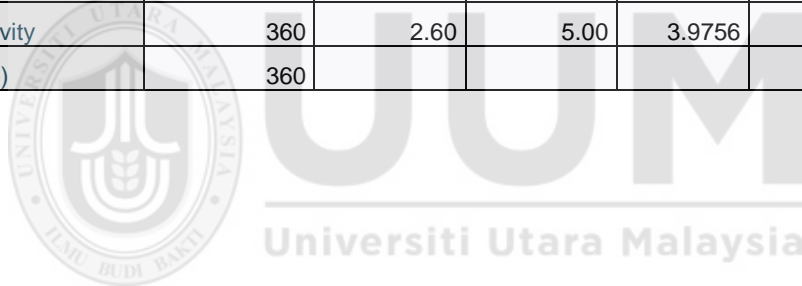
How_long_you_used_that_mobile_network					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More than 5 Years	161	44.7	44.7	44.7
	1-5 years	152	42.2	42.2	86.9
	Less than 1 Year	47	13.1	13.1	100.0
	Total	360	100.0	100.0	



APPENDIX (c): Result of Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Gender	360	1.00	2.00	1.5583	.49728
Age	360	1.00	4.00	2.8306	.77687
Ethnicity	360	1.00	4.00	1.3500	.81405
Highest_Academic_Qualification	360	1.00	4.00	2.1667	.88629
Current_Mobile_Network_you_used	360	1.00	6.00	2.4972	1.42598
How_long_you_used_that_mobile_network	360	1.00	3.00	1.6833	.69198
CS1	360	2.00	5.00	3.9528	.47264
CS2	360	2.00	5.00	3.9083	.53297
CS3	360	2.00	5.00	3.8861	.54423
CS4	360	2.00	5.00	3.9389	.47399
CS5	360	2.00	5.00	3.9472	.53302
SQ1	360	2.00	5.00	3.9139	.43627
SQ2	360	1.00	5.00	3.8861	.54423
SQ3	360	2.00	5.00	3.9056	.46847
SQ4	360	2.00	5.00	3.9139	.38902
SQ5	360	2.00	5.00	3.8750	.42674
SQ6	360	1.00	5.00	3.8194	.59540
SQ7	360	2.00	5.00	3.9306	.40630
SQ8	360	2.00	5.00	3.8639	.50161
SQ9	360	1.00	5.00	3.8444	.60011
SQ10	360	1.00	5.00	3.8389	.57973
SQ11	360	1.00	5.00	3.8639	.54932
SQ12	360	1.00	5.00	3.7944	.73281
SQ13	360	1.00	5.00	3.8750	.58623
SQ14	360	2.00	5.00	3.9111	.45142
SQ15	360	2.00	5.00	3.9278	.45439
SQ16	360	2.00	5.00	3.9278	.45439
SQ17	360	2.00	5.00	3.9278	.45439
SQ18	360	2.00	5.00	3.9000	.45524
SQ19	360	2.00	5.00	3.8806	.48333
SQ20	360	2.00	5.00	3.8889	.49385
SQ21	360	2.00	5.00	3.9111	.45754
SQ22	360	2.00	5.00	4.7750	.69373
NC1	360	2.00	5.00	4.8111	.68236

NC2	360	2.00	5.00	3.9833	.37282
NC3	360	2.00	5.00	3.9528	.36641
NC4	360	1.00	5.00	3.8833	.59031
NC5	360	1.00	5.00	3.8833	.59501
BP1	360	1.00	5.00	3.9167	.60522
BP2	360	1.00	5.00	3.9111	.59980
BP3	360	1.00	5.00	3.8417	.68403
BP4	360	1.00	5.00	3.8889	.60073
BP5	360	1.00	5.00	3.8611	.59491
PA1	360	3.00	5.00	4.0083	.30307
PA2	360	1.00	5.00	3.9611	.44614
PA3	360	2.00	5.00	3.9667	.36413
PA4	360	1.00	5.00	3.9389	.50803
PA5	360	1.00	5.00	4.0028	.39846
CustomerSatisfaction	360	2.00	5.00	3.9267	.47531
ServiceQuality	360	2.05	4.95	3.9261	.45038
NetworkConnectivity	360	2.00	5.00	4.1028	.47931
BillingPrice	360	1.00	5.00	3.8839	.57966
PromotionalActivity	360	2.60	5.00	3.9756	.28804
Valid N (listwise)	360				



APPENDIX (D): Result of Reliability Test

Case Processing Summary			
		N	%
Cases	Valid	360	100.0
	Excluded ^a	0	.0
	Total	360	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.972	53

a) Reliability result of Customer Satisfaction

Case Processing Summary			
		N	%
Cases	Valid	360	100.0
	Excluded ^a	0	.0
	Total	360	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.960	5

b) Reliability result of Service Quality

Case Processing Summary			
		N	%
Cases	Valid	360	100.0
	Excluded ^a	0	.0
	Total	360	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.985	22

c) Reliability result of Network Connectivity

Case Processing Summary			
		N	%
Cases	Valid	360	100.0
	Excluded ^a	0	.0
	Total	360	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.936	5

d) Reliability result of Billing & Price

Case Processing Summary			
		N	%
Cases	Valid	360	100.0
	Excluded ^a	0	.0
	Total	360	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.966	5

e) Reliability result of Promotional Activity

Case Processing Summary			
		N	%
Cases	Valid	360	100.0
	Excluded ^a	0	.0
	Total	360	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.744	5

APPENDIX (E): Result of Pearson Correlation

		Correlations				
		CustomerSatisfaction	ServiceQuality	NetworkConnectivity	BillingPrice	PromotionalActivity
CustomerSatisfaction	Pearson Correlation	1	.896**	.867**	.845**	.245**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	360	360	360	360	360
ServiceQuality	Pearson Correlation	.896**	1	.925**	.889**	.173**
	Sig. (2-tailed)	.000		.000	.000	.001
	N	360	360	360	360	360
NetworkConnectivity	Pearson Correlation	.867**	.925**	1	.949**	.279**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	360	360	360	360	360
BillingPrice	Pearson Correlation	.845**	.889**	.949**	1	.242**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	360	360	360	360	360
PromotionalActivity	Pearson Correlation	.245**	.173**	.279**	.242**	1
	Sig. (2-tailed)	.000	.001	.000	.000	
	N	360	360	360	360	360
**. Correlation is significant at the 0.01 level (2-tailed).						

APPENDIX (F): Multiple Regression

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	PromotionalActivity, ServiceQuality, BillingPrice, NetworkConnectivity ^b		Enter
a. Dependent Variable: CustomerSatisfaction			
b. All requested variables entered.			

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.905 ^a	.820	.818	.20295
a. Predictors: (Constant), PromotionalActivity, ServiceQuality, BillingPrice, NetworkConnectivity				

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	66.483	4	16.621	403.541	.000 ^b
Residual	14.621	355	.041		
Total	81.104	359			
a. Dependent Variable: CustomerSatisfaction					
b. Predictors: (Constant), PromotionalActivity, ServiceQuality, BillingPrice, NetworkConnectivity					

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.132	.172		-.771	.441
ServiceQuality	.721	.065	.684	11.160	.000
NetworkConnectivity	.060	.089	.061	.672	.502
BillingPrice	.133	.059	.162	2.252	.025
PromotionalActivity	.116	.040	.070	2.916	.004

a. Dependent Variable: CustomerSatisfaction

Correlation Matrix

		SQ1	SQ2	SQ3	SQ4	SQ5	SQ6	SQ7	SQ8	SQ9	SQ10	SQ11	SQ12	SQ13	SQ14	SQ15	SQ16	SQ17	SQ18	SQ19	SQ20	SQ21	SQ22
Correlation	SQ1	1.000	.850	.846	.678	.555	.755	.799	.825	.736	.716	.776	.711	.938	.852	.938	.938	.938	.924	.899	.912	.952	.875
	SQ2	.850	1.000	.843	.730	.766	.762	.846	.719	.551	.657	.703	.758	.828	.820	.823	.823	.823	.808	.859	.844	.832	.832
	SQ3	.846	.843	1.000	.765	.707	.738	.595	.633	.483	.559	.675	.836	.870	.869	.792	.792	.792	.778	.762	.713	.905	.843
	SQ4	.678	.730	.765	1.000	.690	.799	.596	.539	.599	.791	.792	.788	.637	.654	.658	.658	.658	.643	.597	.598	.708	.692
	SQ5	.555	.766	.707	.690	1.000	.678	.592	.649	.424	.571	.545	.782	.617	.737	.571	.571	.571	.552	.724	.634	.613	.695
	SQ6	.755	.762	.738	.799	.678	1.000	.685	.682	.701	.755	.776	.725	.661	.635	.642	.642	.642	.653	.670	.681	.667	.751
	SQ7	.799	.846	.595	.596	.592	.685	1.000	.801	.698	.674	.731	.523	.689	.680	.772	.772	.772	.806	.809	.836	.791	.715
	SQ8	.825	.719	.633	.539	.649	.682	.801	1.000	.836	.806	.822	.681	.842	.820	.824	.824	.824	.843	.863	.850	.857	.800
	SQ9	.736	.551	.483	.599	.424	.701	.698	.836	1.000	.841	.907	.675	.697	.648	.715	.715	.715	.728	.762	.778	.741	.658
	SQ10	.716	.657	.559	.791	.571	.755	.674	.806	.841	1.000	.902	.722	.719	.669	.738	.738	.738	.751	.687	.706	.765	.706
	SQ11	.776	.703	.675	.792	.545	.776	.731	.822	.907	.902	1.000	.809	.769	.749	.753	.753	.753	.770	.736	.724	.783	.731
	SQ12	.711	.758	.836	.788	.782	.725	.523	.681	.675	.722	.809	1.000	.822	.862	.717	.717	.717	.698	.796	.714	.735	.764
	SQ13	.938	.828	.870	.637	.617	.661	.689	.842	.697	.719	.769	.822	1.000	.937	.939	.939	.939	.924	.911	.895	.945	.876
	SQ14	.852	.820	.869	.654	.737	.635	.680	.820	.648	.669	.749	.862	.937	1.000	.919	.919	.919	.851	.896	.843	.879	.772
	SQ15	.938	.823	.792	.658	.571	.642	.772	.824	.715	.738	.753	.717	.939	.919	1.000	1.000	1.000	.935	.899	.920	.960	.779
	SQ16	.938	.823	.792	.658	.571	.642	.772	.824	.715	.738	.753	.717	.939	.919	1.000	1.000	1.000	.935	.899	.920	.960	.779
	SQ17	.938	.823	.792	.658	.571	.642	.772	.824	.715	.738	.753	.717	.939	.919	1.000	1.000	1.000	.935	.899	.920	.960	.779
	SQ18	.924	.808	.778	.643	.552	.653	.806	.843	.728	.751	.770	.698	.924	.851	.935	.935	.935	1.000	.882	.904	.947	.881
	SQ19	.899	.859	.762	.597	.724	.670	.809	.863	.762	.687	.736	.796	.911	.896	.899	.899	.899	.882	1.000	.983	.909	.850
	SQ20	.912	.844	.713	.588	.634	.661	.836	.850	.778	.706	.724	.714	.895	.843	.920	.920	.920	.904	.983	1.000	.930	.837
	SQ21	.952	.832	.805	.708	.613	.667	.791	.857	.741	.765	.783	.735	.945	.879	.960	.960	.960	.947	.909	.930	1.000	.867
	SQ22	.875	.832	.843	.692	.695	.751	.715	.800	.658	.706	.731	.764	.876	.772	.779	.779	.779	.881	.850	.837	.867	1.000